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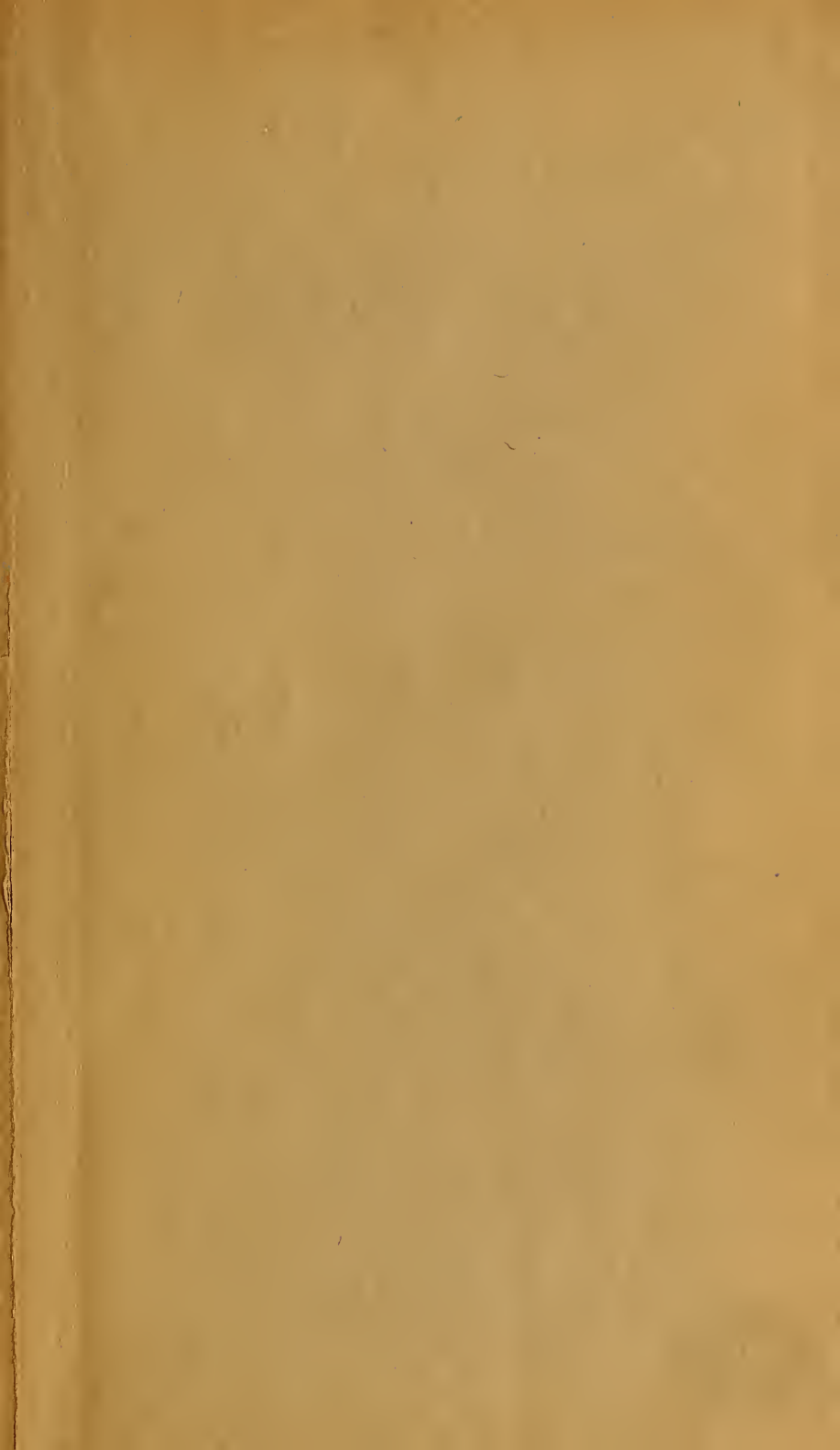
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ANNUAL REPORT

OF THE

FIRE DEPARTMENT
AND WIRE DIVISION

OF THE

CITY OF BOSTON

FOR THE

YEAR ENDING JANUARY 31, 1924



CITY OF BOSTON
PRINTING DEPARTMENT
1924



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ANNUAL REPORT
OF THE
FIRE DEPARTMENT
FOR THE YEAR 1923-24.

BOSTON, January 31, 1924.

HON. JAMES M. CURLEY,
Mayor of the City of Boston:

DEAR SIR,—I have the honor to submit, in accordance with section 24, chapter 3, Revised Ordinances of 1914, City of Boston, the annual report of the Fire Department for the year ending January 31, 1924.

FINANCES.

The total expenditure for the department for the year was \$3,669,450.65, which includes an appropriation of \$89,311.70 expended by the Wire Division.

The revenue for the department for the year amounted to \$91,637.23.

FIRE LOSS.

During the year the department responded to 7,241 alarms, of which 3,810 were still alarms and 3,431 were box alarms. The total number of alarms for 1923 shows an increase of 1,107 over the year 1922, which signifies that the department experienced a very busy year. The fire loss of \$6,286,300 also shows a marked increase over previous years, and while this loss may be accounted

for in part to the inflation of property values since the World War, it can also be attributed to the fact that during 1923 we had at least eight disastrous fires, which of themselves account for almost the total of the difference between the loss of 1922 and that of 1924. The most serious fires where the heaviest losses were suffered were as follows:

January 16, 63 Mt. Vernon street	\$105,250
January 20, 73-75 South street, 170-180 Essex street	150,646
January 22, 118-128 Lincoln street	598,816
April 14, 185-187 State street	175,035
April 25, 116-124 Merrimac street	103,710
May 2, 217-219 State street, 114 Central street,	340,816
July 18, 374-394 Congress street	1,269,300
November 17, 209-211 State street	123,072

In addition to the total loss mentioned above there was a marine loss of \$14,121.

MOTORIZATION.

During the year 1923 twenty-four pieces of motor-driven fire fighting apparatus was purchased and installed in service. This large purchase of motor apparatus made it possible to complete the motorization of the department, and on October 18, 1923, the horse-drawn ladder truck attached to Ladder Company 24, North Grove street, was replaced by a motor-driven city service ladder truck, displacing our last piece of horse-drawn equipment. The motorization of the Fire Department has been extended over a long period of years, and followed a policy established by your Honor in 1912 to install a certain amount each year. This program was carried out effectively, with a slight interruption during the war years, and today we have in service and reserve, exclusive of chiefs' cars, coal and service cars, 145 pieces of motor-driven fire fighting equipment.

There still remains much work to be done along the lines of motorization. We have in service several pieces of tractor-drawn equipment which should be replaced by apparatus of the type which the department has accepted as standard. A formidable reserve equipment must be built up and maintained, and I earnestly recommend that the policy of purchasing a specified

amount of apparatus annually be continued for a few years more so that our equipment will be without comparison with any city in the country.

FIRE PREVENTION.

Much stress has been laid on the subject of fire prevention, and I believe considerable good has been accomplished along this line. In October Fire Prevention Week was observed in Boston as it never was observed before. The Fire Department sent out its appeal to schools, churches, civic and fraternal organizations, mercantile and commercial interests, and received hearty response and co-operation. In the report of the Chief of Department a detailed account is given of the activities of the week.

The work of the Bureau of Fire Prevention and Intelligence has continued to grow and expand. The following figures will show how the work of this bureau is increasing:

	Number of Permits.	Fees Received.	Inspections.
1921.....	10,268	\$11,114 50	104,961
1922.....	11,362	13,006 50	146,324
1923.....	12,611	15,651 00	186,734

It will be noted from these figures that the fees charged for permits are very small. In 1923 the average was at the rate of less than \$1.25 for each permit. It is very evident that in many cases the fee is a dollar or less. Practically every permit issued entails one of two inspections by the Fire Department, and I believe that the city is entitled to a fee commensurate with the cost of their inspections. I strongly recommend, therefore, that a complete revision be made of the schedule of fees charged for permits issued through the Bureau of Fire Prevention and Intelligence so that the city may obtain a fair return for the service rendered in issuing these permits.

FIRE ALARM BOXES.

There are 1,299 fire alarm boxes in service throughout the city, more than one thousand of which are accessible to the public. Exclusive of the boxes owned

by the Schoolhouse Department, 171 of these boxes are privately owned. During the year thirty-one new boxes were installed.

BUILDINGS.

The most important step in the building program of the Fire Department in many years was taken when your Honor sent to the City Council an order appropriating \$500,000 for the erection of a new fire alarm station. For some time past the present fire alarm office has been a cause of grave concern to the officials of the Fire Department and to others whose business identified them with the protection of the city from fire. Many times recommendations have been made, but no action taken. The present fire alarm office is located in a congested section of the city, surrounded by many hazards, and more than once has been threatened by destruction by serious fires which have occurred in the neighborhood.

This year proper action has been taken. An isolated location in the Back Bay Fens has been selected, plans have been prepared and contracts have been made for a building and equipment that will assure the highest type of service and protection for this important branch of the Fire Department. The building should be completed in the spring of 1925, and when the change over is made from the present fire alarm office to the new office, Boston will have a fire alarm signal station unsurpassed in the country.

Considerable attention has also been paid to the condition of our fire stations. Many of these buildings were erected years ago, and are not adapted to the conditions as they exist today. In many of the stations minor changes are being made to meet in a measure the changed conditions. Some of the buildings will have to be rebuilt from the ground up.

On June 27, 1923, the work of rebuilding the quarters of Engine Company 7, East street, was completed and the building dedicated.

Plans have been drawn and a contract made for the erection of a new fire station for Engine Company 40, Sumner and Orleans streets, East Boston. This building will be torn down and a complete new structure erected.

At Engine 12, Dudley street; Engine 13, Cabot street; Engine 18, Harvard street; Engine 19, Norfolk

street; Engine 20, Walnut street; Engine 24, Warren street; Engine 27, Elm street, and Engine 28, Centre street, extensive repairs and alterations have been made to provide suitable housing facilities for the men and apparatus.

During the ensuing year appropriations should be provided if possible for a new fire station for Engine 21, Columbia road, Engine 17, and Ladder 7, Meeting House Hill, Engine 26-35, Mason street.

In regard to Engine 26-35 I would draw attention to the present location of that company in Mason street. Owing to the congestion of traffic on Mason street and West street, Engines 26 and 35 are severely handicapped in making prompt response to alarms of fire. The present location of these companies has nothing to recommend it for the purpose for which it is used. I earnestly recommend that these companies be moved to the junction of Shawmut avenue and Tremont street where a suitable station can be erected on land owned by the city. Quarters could be provided in the new station for Rescue Company 1 now housed in a station on Church street. The land on Mason street is highly assessed and with the sale of this site, together with the sale of the land and building on Church street, the city should receive an amount that will offset a great portion of the cost of a new fire station at Shawmut avenue and Tremont street. By the change of location the efficiency of these companies would not be lessened, but on the contrary would be increased, for the actual time consumed in getting out of Mason street is greater than the time it will take these companies to respond to their present assignments from the suggested location. Furthermore, the widening of Tremont street will make the proposed location an ideal one.

TWO-PLATOON SYSTEM.

During the past two months arrangements have been made for the inauguration of the two-platoon system in the Fire Department, which becomes effective on February 1, 1924. On this date thirty-three promotions will take effect and 210 new men will be appointed to the department to put the new system in operation. In many cities of the country the system was installed piece-meal, but arrangements have been made to have the entire department enter on this new

system at 8 a. m., February 1, 1924. The new men have been examined, measured for uniforms, assigned and will report to their companies on the above date at 8 a. m. Considerable detail work was necessary to make this change-over without interfering with the efficiency of the department. The work had to be done by the clerical force at headquarters, and it is very gratifying to note here that the headquarters staff gave freely of their time and effort to co-operate with the Fire Commissioner and Chief of Department to install the system without confusion.

In the report of the Chief of Department appended hereto is a detailed account of how the new system will operate.

CONCLUSION.

As always the members and employees of the department have manifested a spirit of devotion to duty and I am grateful to them for their co-operation in maintaining the Boston Fire Department at the high standard of efficiency for which it is recognized. To the heads of the various city departments, the public service corporations, the Boston Protective Department, and the public in general I express my thanks for the interest and co-operation manifested.

Appended hereto are the reports of the Chief of Department, the Superintendent of the Fire Alarm Branch, the District Chief in charge of the Bureau of Supplies and Repairs, the Medical Examiner, the Superintendent of the Wire Division, together with the schedules of the organization and equipment of the department, with tables showing the number of alarms, causes of fires, fire loss, etc.

Yours very truly,

THEODORE A. GLYNN,
Fire Commissioner.

REPORT OF CHIEF OF DEPARTMENT.

FROM: THE CHIEF OF DEPARTMENT.

TO: THE FIRE COMMISSIONER.

SUBJECT: ANNUAL REPORT.

I beg to submit the following summary of activities of the department in general for the fiscal year 1923-24:

FIRE LOSS.

Loss (exclusive of marine loss)	\$6,286,299 44
Marine loss	14,120 54
	<hr/>
	\$6,300,419 98

Number of alarms	7,241
Average loss each alarm	\$870
Number of actual fires	6,071
Average loss each fire	\$1,038

ADDITIONS AND CHANGES.

Apparatus.

April 27, 1923, a White truck, equipped for carrying coal, was installed as a fuel car at the quarters of Water Tower 2. Weight, fully equipped, without men, 10,115 pounds; 22.5 horse power.

April 27, 1923, Mack fuel truck was removed from the quarters of Rescue Company 1, Church street, and was placed in service at the quarters of Engine Company 38 and 39, Congress street, replacing Buick fuel truck.

May 5, 1923, a Christie tractor-drawn steam fire engine was placed in service with Engine Company 8, replacing a similar tractor-drawn engine. Weight, fully equipped, without men, 13,000 pounds; 48.6 horse power.

June 26, 1923, an American-LaFrance combination hose and chemical car was placed in service with Engine Company 7, making the company a double unit. Weight, fully equipped, without men, 9,000 pounds; 48.4 horse power.

July 13, 1923, an American-LaFrance 750-gallon combination pumper and hose motor car was placed in service with Engine Company 37. Weight, fully

equipped, without men, 12,000 pounds; 72 horse power. This replaced a pumper of the same type.

July 17, 1923, an American-LaFrance 750-gallon combination pumper and hose motor car was placed in service with Engine Company 27. Weight, fully equipped, without men, 12,000 pounds, 72 horse power. This replaced a horse-drawn steam fire engine and three horses.

July 17, 1923, an American-LaFrance combination hose and chemical car was placed in service with Engine Company 27. Weight, fully equipped, without men, 10,500 pounds, 72 horse power. This replaced a horse-drawn hose wagon and two horses.

July 17, 1923, an American-LaFrance 750-gallon combination pumper and hose motor car was placed in service with Engine Company 32. Weight, fully equipped, without men, 12,000 pounds; 72 horse power. This replaced a horse-drawn steam fire engine, horse-drawn hose wagon and five horses.

July 24, 1923, an American-LaFrance 750-gallon combination pumper and hose motor car was placed in service with Engine Company 9. Weight, fully equipped, without men, 12,000 pounds; 72 horse power. This replaced a horse-drawn steam fire engine and three horses.

July 24, 1923, an American-LaFrance combination hose and chemical car was placed in service with Engine Company 9. Weight, fully equipped, without men, 10,500 pounds; 72 horse power. This replaced a horse-drawn hose wagon and two horses.

July 24, 1923, an American-LaFrance 750-gallon combination pumper and hose motor car was placed in service with Engine Company 40. Weight, fully equipped, without men, 12,000 pounds. This replaced a horse-drawn steam fire engine and three horses.

July 24, 1923, an American-LaFrance combination hose and chemical car was placed in service with Engine Company 40. Weight, fully equipped, without men, 10,500 pounds; 72 horse power. This replaced a horse-drawn hose wagon and two horses.

August 6, 1923, an American-LaFrance 750-gallon combination pumper and hose motor car was placed in service with Engine Company 34. Weight, fully equipped, without men, 12,000 pounds; 72 horse power. This replaced a horse-drawn steam fire engine and three horses.

August 6, 1923, an American-LaFrance combination hose and chemical car was placed in service with Engine Company 34. Weight, fully equipped, without men, 10,500 pounds; 72 horse power. This replaced a horse-drawn hose wagon and two horses.

August 14, 1923, an American-LaFrance 750-gallon combination pumper and hose motor car was placed in service with Engine Company 17. Weight, fully equipped, without men, 12,000 pounds, 72 horse power. This replaced a Christie tractor-drawn steam fire engine.

August 14, 1923, an American-LaFrance motor-driven combination chemical and ladder truck was placed in service with Ladder Company 7. Weight, fully equipped, without men, 11,000 pounds; 72 horse power. This replaced a Robinson motor-driven city service truck.

August 20, 1923, an American-LaFrance motor-driven city service ladder truck was placed in service with Ladder Company 23. Weight, fully equipped, without men, 11,000 pounds; 72 horse power. This replaced a horse-drawn ladder truck and three horses.

September 14, 1923, the location of Water Tower 1 was changed from Bulfinch street (Engine 4) to Fort Hill square, occupying same building as Engine 25 and Ladder 8.

September 18, 1923, an American-LaFrance motor-driven city service combination chemical and ladder truck was placed in service with Ladder Company 16; Weight, fully equipped, without men, 11,000 pounds; 72 horse power. This replaced a Christie tractor-drawn city service truck.

September 19, 1923, an American-LaFrance 750-gallon combination pumper and hose motor car was placed in service with Engine Company 29. Weight fully equipped, without men, 12,000 pounds; 72 horse power. This replaced a horse-drawn steam fire engine and three horses.

September 19, 1923, an American-LaFrance combination hose and chemical car was placed in service with Engine Company 29. Weight, fully equipped, without men, 10,500 pounds; 72 horse power. This replaced a horse-drawn hose wagon and two horses.

September 28, 1923, an American-LaFrance motor-driven city service ladder truck was placed in service

with Ladder Company 27. Weight, fully equipped, without men, 11,000 pounds; 72 horse power. This replaced a horse-drawn city service truck and three horses.

October 5, 1923, an American-LaFrance motor-driven city service ladder truck was placed in service with Ladder Company 19. Weight, fully equipped, without men, 11,000 pounds; 72 horse power. This replaced a horse-drawn city service truck and three horses.

October 8, 1923, a Christie tractor-drawn city service truck was placed in service with Ladder Company 3. Weight, fully equipped, without men, 13,500 pounds; 48.4 horse power. This replaced a horse-drawn city service truck and three horses.

October 8, 1923, an American-LaFrance 750-gallon combination pumper and hose motor car was placed in service with Engine Company 22. Weight, fully equipped, without men, 12,000 pounds; 72 horse power. This replaced a Christie tractor-drawn steam fire engine.

October 15, 1923, an American-LaFrance four-wheel tractor, 75-foot aerial truck, was placed in service with Ladder Company 2. Weight, fully equipped, without men, 17,000 pounds; 72 horse power. This replaced a horse-drawn truck and three horses.

October 17, 1923, an American-LaFrance four-wheel tractor, 75-foot aerial truck was placed in service with Ladder Company 9. Weight, fully equipped, without men, 17,000 pounds; 72 horse power. This replaced a horse-drawn truck and three horses.

October 18, 1923, an American-LaFrance motor-driven city service ladder truck was placed in service with Ladder Company 24. Weight, fully equipped, without men, 11,000 pounds; 72 horse power. This replaced a horse-drawn city service truck and three horses.

October 26, 1923, a Christie tractor-drawn steam fire engine was placed in service with Engine Company 3. Weight, fully equipped, without men, 13,000 pounds; 48.4 horse power. This replaced a steam fire engine of the same type.

December 12, 1923, a Christie tractor-drawn steam fire engine was placed in service with Engine Company 42. Weight, fully equipped, without men, 13,000 pounds; 48.4 horse power. This replaced a steam fire engine of the same type.

December 18, 1923, an American-LaFrance 750-gallon combination pumper and hose motor car was placed in service with Engine Company 48. Weight, fully equipped, without men, 12,000 pounds; 72 horse power. This replaced a Christie tractor-drawn steam fire engine.

January 4, 1924, an American-LaFrance combination hose and chemical car was placed in service with Engine Company 45. Weight, fully equipped, without men, 10,500 pounds; 72 horse power. This replaced a similar make of hose car of less power, which was later placed in service with Engine 18.

January 19, 1924, an American-LaFrance combination hose and chemical car was placed in service with Engine Company 18. Weight, fully equipped, without men, 9,000 pounds; 48.4 horse power. This replaced a combination hose and chemical car of the same type.

Chiefs' Automobiles.

A new Buick coupe was purchased for the use of the Chief of Department, and also three Buick roadsters for use by various chief officers, thus replacing vehicles that had become worn through constant service.

BUILDINGS.

The following new and alteration work has been completed during the fiscal year ending January 31, 1924:

Engine House 7, East street, was entirely rebuilt and dedicated on June 27, 1923.

An electric passenger elevator was installed at Fire Headquarters. This is something which has been badly needed for years, in view of the large number of people who call at the headquarters' building, not only to the Fire Commissioner's office, but also to the Fire Prevention Bureau and Wire Division, for permits, etc., and a great many complaints have been made in the past from the public on account of having to climb the long winding stairs to reach the various offices where they have business to transact.

At Engine House 13, Cabot street, the second floor was completely remodeled, adding a new shower bath and entire new plumbing, lieutenant's room and locker rooms.

At Engine House 18, Harvard street, new shower baths, sink room, toilets, building lockers, dressing

rooms, etc., were installed; also steam changes, mason work, and plastering and painting entire quarters.

At Engine House 12, Dudley street, concreting main and cellar floors, new main doors, new hose rack, plumbing changes.

At Engine House 19, Babson street, thorough change and remodeling of second floor, moving dormitory to rear, building new lieutenant's, wash, locker and shower rooms; installing a magnesite floor, together with necessary changes in heating and complete new plumbing.

At Engine House 24, Warren street, a new shower bath installed and dormitory enlarged across the end of building, this being made possible by discontinuance of hay loft.

At Engine House 20 and Ladder 27, Walnut street, shower bath and sink room installed, excavating and extending boiler room, building concrete wall over face of old foundation, rebuilding chimney and installing window.

At Engine House 27, Elm street, Charlestown, there was a reinforced floor slab laid in apparatus room, concrete floor in basement, steam boiler relocated in cellar, new radiators installed as necessary throughout the house, also necessary plumbing.

At Engine House 28, Centre street, Jamaica Plain, there was a new reinforced concrete floor installed in apparatus room as well as in discontinued rear stable. To complete the entire remodeling of this building, a contract was awarded for brick wainscoting, fireproof plastering, inside finish, steam heating, captain's toilet room and electrical work.

At Engine House 32, Bunker Hill street, Charlestown, a shower bath was provided, together with other new plumbing.

At Chemical 7, Saratoga street, East Boston, a shower bath was installed and various minor improvements.

At the fire alarm shop, Wareham street, automatic sprinklers were installed.

Plans were drawn and contract let for a new house to take the place of Engine House 40, Sumner street, East Boston, which was in a dangerous condition, and the work is now progressing. While this work is under construction, the quarters of Engine Company 40 have been moved to Chemical 7, Saratoga street.

Oil burning equipment has been installed in the following houses:

Engine 1	Engine 22
Engine 4	Engine 25
Engine 5	Engine 28
Engine 6	Engine 48
Engine 7	Ladder 4
Engine 9	Chemical 7
Engine 15	Repair Shop

APPARATUS AND EQUIPMENT.

Thorough inspections and test of apparatus, equipment and hose were conducted at various times during the year. Where defects were found, replacements and repairs were immediately made, in order that the efficiency of the department should not be impaired at any time.

BUILDING INSPECTION.

The usual practice of systematic weekly inspection by officers was continued throughout the year, as it has been our experience that constant attention in this respect is essential, as it is a fact that many property owners and tenants disregard the warnings of this department to clear stairways, dispose of unsightly and dangerous accumulations, and to comply with the city ordinances. It is only in this way that the safety of tenants and employees can be assured.

Theatres, moving-picture houses, and halls were inspected weekly, particular stress being laid upon the condition of fire-extinguishing appliances, as in a great many instances in the past the owners of these particular types of structures have been prone to neglect this phase of protection for their patrons.

All public buildings and schoolhouses were inspected monthly, and conditions as found were reported through channels to department headquarters. Defective conditions were noted and immediate steps were taken to remedy same.

Some 50,000 inspections were made during the year by the regular Fire Prevention inspectors, and wherever defective conditions were noted, same were followed up closely until remedied, and in instances where occupants failed to comply with our requests, they were referred to the State Fire Marshal's office for further handling. At various times during the year, the entire inspection

COMPANY DRILLS.

The Company Drills at Headquarters, which commenced September 4, 1923, and finished October 30, 1923, have been very satisfactory in their results. Each company was drilled in ten evolutions, namely:

1. Connect two lines, 100 feet each, from engine to deluge set.
2. Connect two lines, 100 feet each, from engine to Morse gun.
3. Raise 50-foot ladder to fourth floor window and dog same.
4. Run 200 feet $2\frac{1}{2}$ -inch line over 50-foot ladder, up stairway and show pipe out fifth floor window.
5. Raise 30-foot ladder to fire escape, carry 17-foot roof ladder over same to story above. Dog 30-foot ladder.
6. Run 250 feet $2\frac{1}{2}$ -inch line over 30-foot ladder over fire escape to roof, 75 feet from ground.
7. Take life line and haul 25-foot ladder to roof 75 feet from ground.
8. Take life line, haul 200 feet $2\frac{1}{2}$ -inch hose to roof.
9. Run 100 feet $2\frac{1}{2}$ -inch hose from engine, connect Morse gate and Bresnan nozzle.
10. Connect chuck to hydrant (flexible suction) water to engine.

The following tables show the result of the drills in which all companies participated, except the three fire-boat crews. These tables show the list of companies drilling, the time consumed in each evolution, and time consumed by each company in completing all evolutions.

DIVISION ONE.

			EVOLUTION NUMBER.																								Total Time.	
			Officers.		Men.		1.		2.		3.		4.		5.		6.		7.		8.		9.		10.			
M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	
District No. 1.																												
Ladder Company 2.....	1	9	31		25	1	11		1	20	40	1	30	1	37		39		16		40		8	49				
Engine Company 9.....	2	9	38		25	1	16		1	23	54	1	41	1	46		34		16		42		9	29				
Engine Company 5.....	2	6	32		27	1	9		1	21	53	1	46	2	4		43		18		38		9	51				
Engine Company 40.....	1	9	30		32	1	12		1	34	39	1	45	1	45		37		15		34		9	23				
Ladder Company 21, Chemical 7.....	1	9	26		39	1	7		1	29	42	1	36	1	36		45		23		33		9	26				
Engine Company 11.....	2	10	26		19	1	12		1	20	44	1	39	1	27		43		27		33		8	50				
District No. 2.																												
Ladder Company 9.....	2	7	33		21		58		1	21	46	1	46	1	25		42		23	1	2		9	17				
Engine Company 36.....	2	7	37		27	1	15		1	31	59	1	48	1	38		39		23		28		9	45				
Engine Company 50.....	1	7	24		26	1	6		1	19	53	1	46	1	37		45		17		22		8	55				
Ladder Company 22.....	1	7	26		25	1	9		1	10	47	1	18	1	44		37		21		35		8	32				
Engine Company 32.....	2	6	36		26	1	47		1	54	1	4	1	48	2	3	51		20		35	11	24					
Engine Company 27.....	2	6	22		21	1	17		1	19	59	2	4	1	34		31		25		50		9	52				
District No. 3.																												
Ladder Company 18.....	2	7	42		42	1	5		1	24	49	1	50		2		51		26		50		10	41				

DIVISION TWO.

	Officers.	Men.	EVOLUTION NUMBER.																								Total Time.	
			1.		2.		3.		4.		5.		6.		7.		8.		9.		10.							
			M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.				
																											M.	S.
																											M.	S.
District No. 6.			1	7		39	23	1	19	1	33		55	1	44	1	50		38		16		40	9	57			
Engine Company 1.....																												
Ladder Company 5.....	1	8		28	25		58	1	28				44	1	32	1	24		41		18		33	8	31			
Engine Company 15.....	1	7		38	33	1	26	2	8				1	15	1	50	2	30		50		30	12	18				
Engine Company 43.....	1	7		37	26	1	20	1	43				44	1	36	1	38		38		19		31	9	32			
Ladder Company 20.....	1	7		35	30	1	6	2	15				51	1	17	1	37		41		24	1	28	10	44			
Ladder Company 19.....	1	7		38	27	1	8	1	48				53	1	37	1	24		31		25		43	9	34			
Engine Company 2.....	2	8		28	26		57	1	20				48	1	41	1	52		36		28		50	9	26			
District No. 7.																												
Engine Company 3.....	1	9		22	22		58	1	30				46	1	15	1	26		38		23		30	8	10			
Engine Company 22.....	2	8		24	20	1	23	1	33				43	1	17	1	33		41		31		37	9	2			
Ladder Company 15.....	2	8		30	35	1	2	1	10				44	1	34	1	24		35		27		30	8	31			
Ladder Company 13.....	2	10		41	23		54	1	43				34	1	35	1	18		29		15		35	8	27			
Ladder Company 3.....	2	11		31	31		51	1	9				52	1	26	1	24		41		21		27	8	13			
Engine Company 33.....	1	8		37	47	1	7	1	21				51	1	26	1	41		47		17		34	9	28			

DIVISION THREE.

	Officers.	Men.	EVOLUTION NUMBER.																								Total Time.	
			1.		2.		3.		4.		5.		6.		7.		8.		9.		10.							
			M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.				
District No. 9.																												
Engine Company 24.....	2	6	30	28	1	15	1	16			48	1	26		2	5	1	10		35		47	10	20				
Engine Company 12.....	2	9	36	21	1	7	1	8			50	1	19		1	28		34		18		38	8	19				
Ladder Company 4.....	2	9	30	41	1	8	1	21			54	1	41		1	40		44		26		35	9	40				
Engine Company 21.....	2	6	46	33	1	42	1	55			1	20	1	55		1	45		54		23		35	11	48			
Engine Company 23.....	2	8	29	32	1	23	2	5			1	4	1	52		1	57		48		54		40	11	44			
District No. 10.																												
Ladder Company 29.....	1	7	43	43	1	12	1	17			49	1	45		1	44		50		23		42	10	8				
Engine Company 52.....	2	6	29	22	1	7	1	18			49	1	20		1	31		41		18		35	8	30				
Engine Company 18.....	2	7	34	30	1	5	1	27			59	1	36		1	48		44		31		56	10	10				
Engine Company 17.....	1	6	34	26	1	23	1	23			53	1	25		1	38		1		20		32	9	34				
Ladder Company 7.....	2	7	39	22	1	5	1	31			1	40	1		1	32		43		23		31	9	26				
District No. 12.																												
Engine Company 28.....	1	7	38	37	1	18	1	37			1	8	1	55		2	3		52		31		36	11	15			
Ladder Company 10.....	1	7	39	46	1	13	1	44			1	9	1	41		2	4		51		41		38	11	26			
Engine Company 42.....	2	7	35	25	1	19	1	28			1	18	1	38		1	55		4		20		36	10	38			
Ladder Company 30.....	2	7	1	32	1	18	1	45			1	16	1	38		1	37		47		43		58	11	43			
Ladder Company 23.....	1	8	33	33	1	3	1	39			1	5	1	42		1	34		48		45		59	10	41			

FIRE DEPARTMENT.

District No. 13.

DISTRICT No. 13.																		
Engine Company 30.....	1	6	33	25	58	1	24	47	1	40	1	49	1	4	23	32	9	35
Ladder Company 25.....	1	6	38	29	1	9	1	44	1	41	2	8		55	18	54	10	20
Engine Company 45.....	2	8	46	36	1	34	1	4	1	34	2	8		44	42	37	11	31
Ladder Company 16.....	1	5	32	34	1	27	1	1	1	46	1	40		59	46	3	11	32
Engine Company 53.....	1	7	46	31	1	13	1	58	1	39	1	36	1	3	42	33	10	30
DISTRICT No. 14.																		
Engine Company 16.....	2	8	34	33	1	8	1	1	1	59	1	36		43	38	41	10	13
Ladder Company 6.....	1	9	36	24	1	17	1	44	1	26	1	25		41	26	50	8	59
Engine Company 46.....	2	10	23	27		55	1	45	1	14	1	12		27	20	37	7	34
Engine Company 20.....	2	8	22	29	1	11	1	56	1	16	1	40		45	21	32	9	2
Ladder Company 27.....	1	7	36	21	1	25	1	59	1	33	1	35		48	18	33	9	33
DISTRICT No. 15.																		
Engine Company 49.....	2	7	35	35	1	8	1	54	1	51	1	36		53	33	34	10	25
Engine Company 48.....	2	6	27	32	1	20	1	43	1	25	1	55		49	19	39	9	30
Ladder Company 28.....	1	6	41	42	1	22	1	52	1	43	1	54		46	23	45	10	42
Engine Company 19.....	1	6	36	23	1	27	1	1	6	1	25	1	52		32	36	10	12

DISTRICT No. 14.

District No. 14.																					
Engine Company 16.....	2	8	34	33	1	8	1	21	1			1	59	1	36	43	38	41	10	13	
Ladder Company 6.....	1	9	36	24	1	17	1	10	44			44	1	26	1	25	41	26	50	8	59
Engine Company 46.....	2	10	23	27		55	1	14				45	1	14	1	12	27	20	37	7	34
Engine Company 20.....	2	8	22	29	1	11	1	30	56			56	1	16	1	40	45	21	32	9	2
Ladder Company 27.....	1	7	36	21	1	25	1	25	59			59	1	33	1	35	48	18	33	9	33
District No. 15.																					
Engine Company 49.....	2	7	35	35	1	8	1	46	54			54	1	51	1	36	53	33	34	10	25
Engine Company 48.....	2	6	27	32	1	20	1	21	43			43	1	25	1	55	49	19	39	9	30
Ladder Company 28.....	1	6	41	42	1	22	1	34	52			52	1	43	1	54	46	23	45	10	42
Engine Company 19.....	1	6	36	23	1	27	1	29	1	6		1	6	1	25	1	46	32	36	10	12

DISTRICT No. 15.

District No. 15.																		
Engine Company 49.....	2	7	35	35	1	8	1	46	54	1	51	1	36	53	33	34	10	25
Engine Company 48.....	2	6	27	32	1	20	1	21	43	1	25	1	55	49	19	39	9	30
Ladder Company 28.....	1	6	41	42	1	22	1	34	52	1	43	1	54	46	23	45	10	42
Engine Company 19.....	1	6	36	23	1	27	1	29	1	6	1	25	1	46	32	36	10	12

COMPANY RECORDS.—BY DISTRICTS.

COMPANY RECORDS.— BY DISTRICTS.	
District 9.— Engine Company 12.	8 minutes 19 seconds.
District 10.— Engine Company 52.	8 minutes 30 seconds.
District 12.— Engine Company 42.	10 minutes 38 seconds.
District 13.— Engine Company 30.	9 minutes 35 seconds.
District 14.— Engine Company 46.	7 minutes 34 seconds.
District 15.— Engine Company 48.	9 minutes 30 seconds.

FIRE PREVENTION WEEK.

October 7 to 13, inclusive, was observed as Fire Prevention Week and the most intensive campaign in the history of the department was conducted along this line. Every possible agency was brought into play to make this week a success. Civic organizations, mercantile and manufacturing interests, department stores, churches, schools (both public and parochial), fraternal organizations, Boy Scouts, Camp Fire Girls, women's clubs, local Boards of Trade and Improvement Associations, insurance and underwriting interests, theaters and moving picture houses, newspapers, municipal departments, etc.

The film called "FIRE" furnished by the National Board of Fire Underwriters was displayed at different theaters during the week, as well as numerous slides containing short and pithy statements regarding the importance of fire prevention. Many of the theaters printed in their programs a notice calling attention to Fire Prevention Week.

Fifty thousand "Home Inspection" blanks were distributed among the various schools of the city, and these blanks were checked up and conditions corrected where found necessary. Six hundred copies of the book "Safeguarding the Home against Fire" were also distributed among the schools. This book, which is issued by the National Board of Underwriters, contains much valuable information which if imparted to the school children in a proper manner will produce wonderful results.

Thousands of posters, fliers, etc., were posted in conspicuous places throughout the city, in shops, store windows, elevated and subway stations, bill boards, on taxi windows, in fact, everywhere where they could be placed to advantage. Thousands of our own Fire Prevention leaflets were distributed, and this same leaflet brought more favorable comment than anything else which was issued during the campaign.

Various officers and members of the department gave short four-minute talks in the schools and other places of assembly. All houses of the department were open to the public and instructions were given on how to properly send in an alarm of fire, and short talks given.

This department, co-operating with the Massachusetts Safety Council, set-up, maintained and furnished men to operate a fire alarm box at the Health Show in Mechanics Building during that week, and these men also gave short talks on Fire Prevention.

A truck with a fire alarm box set up thereon, with members to give instructions regarding same, was operated throughout the city during that week, and another horse-drawn truck bearing large signs with pertinent facts regarding Fire Prevention, was also operated daily throughout the city.

A circular letter was sent to over three hundred of the leading merchants, manufacturers, wool and cotton interests, paint and hardware concerns, etc., calling upon them to establish self-inspection systems in their various lines of business, and calling their attention to the importance of Fire Prevention to those to whom it really means the most, namely, the employers throughout the city, and in turn to their employees.

In all, we estimate that approximately five hundred thousand people were reached directly during this Fire Prevention campaign, and I feel safe in saying that it was the most intensive of its kind ever conducted in the City of Boston, and I feel certain that very beneficial results will accrue therefrom.

HYDRANTS.

The following is a list of the types and number of each, of hydrants, in service for fire purposes, as of January 31, 1924:

Ordinary post	4,147
Boston post.	3,231
Lowry	1,392
Boston lowry	561
Bachelor & Finneran post	597
High pressure	370
Boston	268
Chapman post	187
Ludlow post	20
Matthew post	4
Coffin post	1
Total	<u>10,777</u>

HIGH PRESSURE SYSTEM.

The records of our two high pressure stations for the year are as follows:

Station No. 1.— Total alarms to which pumps responded, 169; total time pumps actually operated, 58 hours 3 minutes; water discharge recorded on Venturi meters, 1,450,000 gallons.

Station No. 2.— Total alarms to which pumps responded, 131; total time pumps actually operated, 61 hours 46 minutes; water discharge recorded on Venturi meters, 805,000 gallons.

(Owing to the construction of the Venturi meters, they do not record flows under six hundred gallons per minute.)

The total amount of pipe installed in the High Pressure Fire System up to January 1, 1924, is as follows:

12-inch Pipe.	16-inch Pipe.	20-inch Pipe.
18,613 feet.	33,701 feet.	20,140 feet.
3.53 miles.	6.38 miles.	3.81 miles.

Total amount of piping in system: 72,454 feet, or 13.73 miles.

TOTAL LENGTH OF PIPE THAT WILL BE IN COMPLETED SYSTEM.

12-inch Pipe.	16-inch Pipe.	20-inch Pipe.	Total.
33,956 feet.	39,824 feet.	24,661 feet.	98,441 feet.
6.43 miles.	7.54 miles.	4.67 miles.	18.64 miles.

Total number of hydrants in service, 370.

The high pressure problem in the City of Boston has long since passed through the experimental stages, and from the practical work performed under stress it has proven an absolute necessity in the extinguishment of fires in the high value section of the city.

SIGNS ON SPRINKLER SYSTEM ALARM GONGS.

With your approval and that of the Boston Board of Fire Underwriters, a uniform sign was adopted which

may be placed near the outside sprinkler alarm gong to indicate its purpose and to suggest action in case the gong is ringing. This is an enameled iron sign $11\frac{1}{2}$ inches by 15 inches, with the words, "Sprinkler Fire Alarm—When Bell Rings call Police or Fire Department" in white lettering on a red background.

Recommendations have been made that this sign be placed on all buildings having sprinkler systems so that the loss of valuable time will be avoided in sending in alarms of fire, incidentally reducing the loss by water and also by fire, through expediting the Fire Department's response.

TWO-PLATOON SYSTEM.

In accordance with orders, I visited the cities of Philadelphia, Buffalo, Chicago, Detroit, Cleveland and New York, for the purpose of investigation and study of the so-called two-platoon system for fire departments.

So far as the efficiency of the fire fighting service goes, the two-platoon system has not lessened it in these cities, with one exception, but if anything, has actually increased the efficiency.

There are, in general, two well recognized methods of operating the two-platoon system. The first in the twenty-four hour shift — *i. e.*, where one-half of the department is on duty for twenty-four hours and is then relieved by the other half of the department, and so on. This amounts virtually to a day off in two, without meal hours for the shift on duty. This system is now in force in Cleveland, Chicago and Detroit. In Chicago, some of the men do not like this plan on account of the question of meals.

The second method of operation is on the basis of two shifts in every twenty-four hours, generally ten and fourteen hours alternated, in some cases the alternation coming by days, in other cases the alternation coming by weeks. This latter method is the one which is to be adopted by our department, one shift being from 8 a. m. to 6 p. m., and the other from 6 p. m. to 8 a. m., and the tour of duty will be as follows:

First Day.	Second Day.	Third Day.	Fourth Day.	Fifth Day.	Sixth Day.
On day.	On day.	On 24 hours.	On night.	On night.	Off 24 hours.

Every one of the cities mentioned found it necessary to put on a considerable number of additional men, in order to put the two-platoon system into operation without loss of efficiency to the fire service, and to install this system in the Boston Fire Department it will require an increase in officers and men as follows:

3 Deputy Chiefs.
15 District Chiefs.
7 Captains.
8 Lieutenants.
177 Privates.
210 Total — All grades.

One of the principal benefits which will accrue to the department with the installation of the Two-Platoon System is the increase in man-power in the different companies with a corresponding increase in efficiency. For example, under the day-in-three system, the actual fire fighting force of the department is approximately 1,200 officers and men, which gives us actually for duty every day two-thirds of 1,200 or 800 officers and men. Take into consideration also that during almost 12 hours of the 24, one-third of this 800 are at meals, and we find that during almost 12 continuous hours of every day we have in the apparatus houses 534 men ready for immediate response to an alarm, or less than 50 per cent of our total force. Under the Two-Platoon System we will have on duty approximately 725 men ready for immediate response during every hour of the twenty-four.

Under the day-in-three plan, many leaves of absence were granted for various important reasons, when the strength of forces would allow, much of which will be eliminated under the Two-Platoon System, in view of the fact that many things that now require a leave of absence will be attended to on the men's off time.

Of course, from a humanitarian standpoint, the greatest benefit accruing from this System is the fact that the men will be enabled to spend a good portion of their time with their families, which is one of the greatest hardships of the day-in-three or five, etc., systems, whereby men were home only one day in three or five, except for the short time allowed for meal hours, and in a great many cases members are located in companies

which are so far from their homes that they are able to see their families only on their days-off.

The total additional outlay for the first year which will be made necessary by the installation of the Two-Platoon System, including the cost of uniforms, fire hats, etc., and salaries of additional officers and privates, is estimated at \$349,647.50.

RECOMMENDATIONS.

Apparatus.

I earnestly recommend the purchase of the following major motor-driven fire-fighting apparatus, to be located in the houses specified:

Engine 4, Bulfinch Street, West End.— One 750-gallon pumper to replace Christie tractor-drawn steam fire engine.

Engine 33, Boylston and Hereford Streets, Back Bay.— One 750-gallon pumper; one combination chemical and hose car to replace Christie tractor-drawn steam fire engine and a Seagrave hose motor car which is practically worn out.

Engine 39, Congress Street, South Boston.— One 750-gallon pumper to replace a Christie tractor-drawn steam fire engine.

Engine 42, Washington Street, Egleston Square.— One 750-gallon pumper to replace a Christie tractor-drawn steam fire engine.

NOTE.— The boilers on the four (4) tractor-drawn steam fire engines mentioned above have so far deteriorated as to necessitate the expenditure of considerable money for new boilers.

Engine 14, Centre Street, Roxbury.— One combination chemical and hose car to replace Knox hose car which is practically worn out.

Engine 16, River and Temple Streets, Dorchester Lower Mills.— One combination chemical and hose car. This installation required to make this a double-unit company.

Engine 43, Andrew Square, South Boston.— One combination chemical and hose car to replace Velie hose car which is practically worn out.

Ladder 6, River and Temple Streets, Dorchester Lower Mills.— One city service truck to replace worn-out tractor drawn truck.

Ladder 26, Longwood and Brookline Avenues, Back Bay.— One city service truck to replace worn-out tractor drawn truck.

Ladder 4, Dudley Street, Roxbury.— One four-wheel tractor. Front drive on this particular apparatus is worn out in service and should be replaced as soon as possible.

Ladder 17, Harrison Avenue, City Proper.— One four-wheel tractor. Front drive on this particular apparatus is worn out in service and should be replaced as soon as possible.

I would also recommend the purchase of a new rescue wagon, specifications to be drawn for same which will cover the carrying of delicate mechanism such as gas masks, etc., and the establishment of a new rescue company, in view of the fact that the present running card of Rescue Company No. 1 is really too much for one company to handle properly.

I would further recommend the purchase of two five-passenger cars for replacement of cars in service of deputy chiefs, and four roadsters to replace cars in use by district chiefs. All of these cars are practically worn out in service.

NEW BUILDINGS.

Engine 21, Columbia Road, Dorchester.— New building on present foundation.

Engine 17, Ladder 7, Meeting House Hill, Dorchester.— New building on a new site.

I would also recommend a new bungalow fire station and site in West Roxbury.

I further recommend the location of a new engine company in the vicinity of Jersey and Boylston streets, owing to the rapid growth in that district, and it is both a business and dwelling section which requires more adequate protection than it has at the present time. Recent building operations in that locality have been in leaps and bounds and the distance on center between Engine House 37, located at Longwood avenue and Brookline avenue, Engine House 41 on Harvard street, Allston district, and Engine 33 at Boylston and Hereford streets would show clearly that more protection is required.

I also recommend that a new fire station be built at the junction of Tremont street and Shawmut avenue

over the subway, and that Engine Company 26 and 35 and High Pressure Company be removed from their present location on Mason street to new location herein mentioned. Included in this new structure, room should be made also for the quarters of the Rescue Company and also the Chief of Department.

REMODELING AND FIREPROOFING.

Engine 12, Dudley Street.—Finishing first floor, remodeling second floor.

Engine 27, Elm Street, Charlestown.—Finishing first floor, brick, plaster and finish.

Engine 19, Norfolk Street, Mattapan.—Fireproof floor slab, finishing walls and ceiling.

Engine 34, Western Avenue, Brighton.—Fireproofing floor, walls and ceiling.

Engine 20 and Ladder 27, Walnut Street, Dorchester.—This building is clearly off center and should be considered for relocation.

Engine 11 and Ladder 21, Saratoga Street, East Boston.—Fireproof floor slab, fireproofing walls and ceiling, improvements.

Engine 37 and Ladder 26, Longwood Avenue, Back Bay.—Rebuilding.

Engine 24, Warren Street, Roxbury.—Reinforced floor, fireproofing walls and ceiling, first floor.

Engine 32, Bunker Hill Street, Charlestown.—Reinforced floor, fireproofing walls and ceiling, first floor, remodeling second floor.

Engine 13, Cabot Street, Roxbury.—Fireproofing first floor, walls and ceiling.

Engine 42 and Ladder 30, Egleston Square.—Fireproofing first floor, remodeling second floor.

Ladder 17, Harrison Avenue, City Proper.—Fireproofing first floor, alterations on second.

Engine 6, Leverett Street, West End.—Fireproofing first floor and remodeling.

Engine 2, Fourth Street, South Boston.—Fireproofing first floor, walls and ceiling.

Ladder 23, Washington Street, Dorchester.—Finishing alterations second and third floors.

Engine 3, Harrison Avenue, South End.—Fireproofing first floor, walls and ceiling.

Ladder 3, Harrison Avenue, South End.—Fireproofing first floor, walls and ceiling.

Engine 22 and Ladder 13, Warren Avenue, South End.—Fireproofing first floor, walls and ceiling, remodeling.

Engine 23, Northampton Street, Roxbury.—Fireproofing first floor, walls and ceiling, remodeling.

Engine 29 and Ladder 11, Chestnut Hill Avenue, Brighton.—Fireproofing first floor and ceiling.

Engine 36 and Ladder 22, Monument Street, Charlestown.—Fireproofing first floor, walls and ceiling.

Engine 45 and Ladder 16, Washington Street, Roslindale.—Fireproofing floor, walls and ceiling.

Engine 48 and Ladder 28, Harvard Avenue, Hyde Park.—Fireproofing first floor, walls and ceiling.

Ladder 12, Tremont Street, Roxbury.—Fireproofing floor, walls and ceiling, also remodeling first floor.

Engine 9 and Ladder 2, Paris Street, East Boston.—Fireproofing first floor, walls and ceiling.

Ladder 9, Main Street, Charlestown.—Fireproofing first floor, walls and ceiling.

Engine 47 (fireboat).—Repairs and improvements.

Ladder 24, North Grove Street, West End.—Fireproofing first floor, walls and ceiling.

Rescue 1, Church Street.—Fireproofing first floor, walls and ceiling.

Engine 18, Harvard Street, Dorchester.—Fireproofing floor, walls and ceiling.

Engine 30 and Ladder 25, Centre Street, West Roxbury.—Fireproofing floor, walls and ceilings.

Engine 16 and Ladder 6, River Street, Dorchester Lower Mills.—Fireproofing first floor, walls and ceiling.

CONCLUSION.

To the Boston Board of Fire Underwriters, the National Board of Fire Underwriters, the New England Insurance Exchange, and the National Fire Protection Association, who so kindly co-operated with this department in the development of many progressive measures, I wish to extend my sincere appreciation. Also to the various municipal departments, public service corporations, and the Boston Protective Department, which rendered such valuable assistance during the past year, I wish to express my thanks.

Finally, to the members of the department who so devotedly and efficiently performed their many difficult and, at times, hazardous tasks, I wish to express my heartfelt gratitude, and it is my hope that the department will continue its place among the foremost fire departments throughout the world, with a continuance of the same high caliber of service, as in the past.

Respectfully,

JOHN O. TABER,
Chief of Department.

FIRE ALARM BRANCH.

FROM: THE SUPERINTENDENT OF FIRE ALARM BRANCH.

TO: THE FIRE COMMISSIONER.

SUBJECT: ANNUAL REPORT OF FIRE ALARM BRANCH, 1923-1924.

I submit herewith the annual report of the Fire Alarm Branch for the fiscal year ending January 31, 1924:

OPERATING DIVISION.

NOTE.—The records of this division are for the calendar year 1923.

BOX ALARMS RECEIVED AND TRANSMITTED.

First alarms	3,181
Second alarms	56
Third alarms	20
Fourth alarms	8
Fifth alarms	1
Total	<u>3,266</u>

BOX ALARMS RECEIVED BUT NOT TRANSMITTED.

Same box received two or more times for same fire	299
Adjacent boxes received for same fire	217
Received from boxes but treated as stills	2
Total	<u>518</u>

STILL ALARMS RECEIVED AND TRANSMITTED.

Received from citizens (by telephone)	2,058
Received from police department (by telephone)	329
Received from fire department stations (by telephone),	1,327
Received from boxes but treated as stills	2
Mutual Aid alarms, adjacent cities and towns, classed as stills	36
Emergency services, classed as stills	58
Total	<u>3,810</u>

Still alarms received by telephone for which box alarms were later transmitted	250
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AUTOMATIC AND A. D. T. ALARMS.

Boston Automatic Fire Alarm Company:	
Transmitted by company to department stations	198
Department box alarms transmitted in connection with same:	
Before automatic alarm	10
After automatic alarm	16
A. D. T. Company:	
Received at fire alarm office	51
Department box alarms transmitted in connection with same:	
Before A. D. T. alarm was received	7
After A. D. T. alarm was transmitted	2
Received after still alarms were transmitted	3
A. D. T. alarms transmitted to department	41

SUMMARY OF ALARMS.

Alarms received:	
Box alarms, including multiples	3,784
Still alarms, all classes	3,808
Boston automatic alarms	198
A. D. T. alarms	51
Total received from all sources	<u>7,841</u>
Excludes following duplications:	
Box alarms received but not transmitted	518
Still alarms for which box alarms were transmitted	250
Automatic alarms for which box alarms were trans- mitted	26
A. D. T. alarms for which other alarms were pre- viously transmitted	10
Total duplications eliminated	<u>804</u>
Total alarms, with duplications eliminated, to which apparatus responded	<u>7,037</u>

FIRE ALARM BOX RECORDS.

Boxes from which no alarms were received	422
Box tests and inspections	8,736

NOTE.— All keyless doors are tested weekly.

CONSTRUCTION DIVISION.

EXTERIOR WORK.

In the regular work done during the year about 5,760 feet of underground ducts were laid, 29 new box posts

were set, 34 new boxes were connected into service and about 59,000 feet of underground cable was installed.

For connections to the proposed new signal station in the Fenway district an agreement was made with the telephone company whereby about 17,000 feet of ducts were installed underground. Of this amount 10,600 feet are to be reserved for the use of this department. In addition to that work eight large size cable terminal posts were installed. About 1,475 feet of ducts were used to connect these posts to the conduit system.

NEW FIRE ALARM SIGNAL STATION.

For several years past efforts have been made to obtain a building to house the central office fire alarm equipment in a location free from conflagration hazard. The necessity of such action was made more imperative because the present equipment was insufficient to meet the requirements. The Boston Board and the National Board of Fire Underwriters strongly urged that action be taken, but it remained for the present administration to do something definite. When the project was finally started the Chamber of Commerce heartily endorsed it.

An appropriation of \$500,000 was made and a site was selected in the Back Bay Fens with the consent of the Legislature. At this time, the beginning of the fiscal year 1924-25, the contract for the fire alarm equipment amounting to \$217,000, has been made with the Game-well Fire Alarm Telegraph Company. The conduits necessary to connect the present underground cable system with the new building have been laid, cable terminal posts have been installed, the contract for all necessary cables has been made and the plans and specifications for the construction of the building have been completed.

RADIO.

Four transmitting and receiving radio stations have been installed, one at Fire Headquarters in the fire alarm office and one on each of the three fire boats. It is now possible to be in direct communication at all times with each of the boats.

UNDERGROUND CABLES INSTALLED.

Charlestown.

	Cond.	Fect.
Medford street, from Chelsea street to		
Decatur street	10	266

	Cond.	Feet.
Medford street, from Cook street to Tufts street	6	2,508
Carney street, from Bunker Hill street to Medford street	6	867
Building connections	4	108

South Boston.

I street, from Broadway to East Sixth street,	10	1,022
East Fourth street, from I street to K street,	10	701
K street, from East Fourth street to East Fifth street	10	279
Broadway from Dorchester street to G street	6	348
G street, from Broadway to East Sixth street	6	939
I street, from Broadway to East First street,	6	1,032
East First street, from I street to K street,	6	684

Dorchester.

River street, from Central avenue to Blue Hill avenue	15	6,420
Dorchester avenue, from Savin Hill avenue to Freeport street	10	2,282
Adams street, from Codman street to Granite avenue	10	1,146
Adams street, from King square to Granite avenue	6	5,811
Washington street, Aspinwall road, Whitfield street and Talbot avenue, Box 3355 to Box 3354	6	1,658
River street and Central avenue, from Engine 16 to Milton	6	1,505
Bowdoin, Olney and Richfield streets, from Box 3185 to Box 3187	6	1,543
Post and pole connections	10	484
Post and pole connections	6	1,511
Post and pole connections	4	1,170

Hyde Park.

River street, from Malta street to Metropolitan avenue	15	5,641
Pole connections	6	375

Roxbury.

Beacon and St. Mary's streets, from Audubon circle to Mountfort street	6	1,500
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	Cond.	Feet.
Ipswich and Boylston streets from Lansdowne street to Jersey street	6	1,691
Quincy street, from Dacia street to Magnolia street	10	1,460
Pole connections	6	427

West Roxbury.

Belgrade avenue, from Walworth street to Colberg avenue, Colberg avenue, Loraine street, Belgrade street, Beach street, and Anawan avenue to Park street	6	7,040
Maple street, from Centre street to Pomfret street	6	2,197
Poplar street, from Washington street to Hillside avenue	6	1,950
Cornell street, from Colberg avenue to Aldrich street	6	253
Post connections	10	436
Post connections	4	58

Brighton.

Cambridge street, from North Harvard street to Box 5211	6	2,074
Corey road, from Wellington to Windsor road	6	1,354
Pole connections	6	259
Post connections	4	422

FIRE ALARM BOX POSTS INSTALLED WITH DUCT LENGTHS TO SAME.

Charlestown.

Medford and Pearl streets	16 feet
Medford and Cottage streets	16 feet
Medford and Decatur streets	20 feet
Medford street, opposite Tufts street	42 feet

Dorchester.

Hamilton and Barry streets	120 feet
Richfield street and Puritan avenue	7 feet
Adams street, opposite Centre street	7 feet
Adams and Lonsdale streets	7 feet
Adams and Ashmont streets	13 feet
Adams and Francconia streets	6 feet
Adams street and Granite avenue, 2 duct	19 feet
Florida and King streets	110 feet
Florida and Templeton streets	59 feet

Dorchester.

Washington and Rockwell streets	12 feet
Washington and Fairmount streets	15 feet
River and Idaho streets	8 feet
River street, near Consumptives' Hospital	35 feet
River and Fremont streets	9 feet
Talbot avenue and Spencer street	32 feet

Hyde Park.

River and Massasoit streets	32 feet
River and Blake streets	7 feet
River street and Reddy avenue	27 feet

Roxbury.

Ipswich and Lansdowne streets (2 ducts)	6 feet
Blue Hill avenue and Winthrop street	23 feet
Quincy and Magnolia streets	20 feet

West Roxbury.

Cornell and Aldrich streets	13 feet
Hyde Park avenue and Canterbury street	16 feet

Brighton.

Corey and Wellington roads	26 feet
Myrick and Bayard streets	50 feet

FIRE ALARM BOX POSTS RESET.

Humboldt avenue and Townsend street (broken by truck).	
Washington and Dale streets (broken by truck).	
Clarendon and Chandler streets (twice) (broken by truck).	
Washington street, opposite Water street (broken by truck).	
India and Central streets (broken by truck).	
Pierce square (broken by truck).	
Washington and West streets (broken by truck).	
Commonwealth avenue and Clarendon street (broken by truck).	
Albany and Yeoman streets (broken by truck).	
Dudley street, opposite Magnolia street (broken by truck).	
Dorchester avenue and Victoria street (broken by truck).	
Washington and Roslin streets (broken by truck).	
Tremont and Winter streets (broken by truck).	
Tremont and Ruggles streets (broken by truck).	
Clarendon and Stuart streets (broken by truck).	
Commonwealth avenue and Granby street (broken by truck).	
Walnut avenue and Crawford street (broken by truck).	
Causeway and Haverhill streets (broken by truck).	
Park square (broken by truck).	
Washington and Concord streets (change of curb).	
Hyde Park avenue and Walk Hill street (extra pipe) . .	18 feet
Harvard and Glenway streets (grade changed).	

Spring and Centre streets (change of location).
 School street, opposite Byron court (change of curb).
 Stuart and Carver streets (change of curb).
 Washington and Beech streets (change of curb).
 Chelsea street, opposite Prospect street (change of curb).
 St. Mary's and Mountfort streets (change of curb).
 Tremont and Warrenton streets (broken water main).
 Columbus avenue and Centre street (relocation)
 extension 23 feet
 Harrison avenue and Kneeland street (out of plumb).

Thirteen other posts were broken by vehicles which required the replacement of top sections of posts.

NEW CABLE POSTS INSTALLED.

Hemenway and Boylston streets, 5 ducts	61 feet
Brookline and Commonwealth avenues, 4 ducts	15 feet
Massachusetts avenue and St. Stephen street, 6 ducts	36 feet
Harrison avenue and Florence street, 4 ducts	9 feet
Washington and Northampton streets, 6 ducts	40 feet
Tremont and Northampton streets, 6 ducts	37 feet
Tremont and Ruggles streets, 6 ducts	29 feet
Berkeley and Stuart streets, 6 ducts	37 feet

CABLE POSTS REPLACED.

Tremont and Clarendon streets.
 Harrison avenue and Beach street.
 Congress and A streets.
 Main and Medford streets.
 Centre and Moraine streets (broken three times).

CABLE POST RELOCATED.

Tremont and Stuart streets, 2 ducts	60 feet
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CABLE POST REMOVED.

West First and A streets.

NEW CONDUITS INSTALLED.

Corey Road, from Wellington road to Cummings road	490 feet
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NEW POLE CONNECTIONS.

Cummings road at Corey road	249 feet
Royal street, near Cambridge street	33 feet
Medford street, near Cook street	87 feet
Medford and Terminal streets	182 feet

Medford and Tufts streets (Water Department building)	43 feet
River and Standard streets	76 feet
River and Cedar streets	83 feet
River street and Wood avenue	80 feet
Wrentham street, near Dorchester avenue	7 feet
Barry street, near Hamilton street	36 feet
Adams and King streets *	124 feet
Adams and Beaumont streets *	190 feet
Adams and Minot streets *	213 feet
Adams street, near Codman street *	254 feet
Adams street, at Codman street *	121 feet
Marsh street and Granite avenue *	147 feet
Granite avenue and Adams street *	139 feet
Washington and Rockwell streets	108 feet
Washington and Bailey streets	109 feet
Quincy street and Howard avenue *	147 feet
Mascoma street at Quincy street *	180 feet
Spring and Gardner streets *	105 feet
Spring street near Baker street *	122 feet

DUCTS ABANDONED.

Tremont and Stuart streets, 2 ducts	14 feet
West First and A streets, 2 ducts	54 feet
Main and Miller streets, 2 ducts	55 feet
Spring and Centre streets, 1 duct	23 feet
Hampden street and Norfolk avenue, 1 duct	70 feet

POLE AND BUILDING CONNECTIONS REPLACED.

Hampden street and Norfolk avenue	70 feet
South Ferry House, East Boston	65 feet

PUBLIC FIRE ALARM BOXES ESTABLISHED.

Box.	LOCATION.
234.	Ipswich and Lansdowne streets.
244.	Opposite 270 Amory street.
2491.	Pond and May streets.
2547.	Florence street and Bexley road.
2622.	Belgrade avenue and Bradwood street.
2629.	Park and Martin streets.
2726.	Weld street and Parkvale road.
2734.	Weld street and Russett road.
315.	Blue Hill avenue and Winthrop street.
3187.	Richfield street and Puritan avenue.
3374.	Callender and Lucerne streets.
3428.	Adams and Centre streets.
3443.	King and Florida streets.

* Work done for this department by Telephone Company.

Box.	LOCATION.
345.	Victory road and Houghton street.
3519.	Milton avenue and Fairmount street.
3563.	River and Fremont streets.
3571.	Oakland and Bismarck streets.
3613.	Washington and Rockwell streets.
3633.	Washington and Codman streets.
3782.	Glenwood avenue and Loring street.
45.	Medford and Cottage streets.
5216.	Hooker and Holman streets.
5218.	Myrick and Bayard streets.
5279.	Parsons street and Electric avenue.
528.	Parsons and Surrey streets.
7165.	East First and West First streets.

SCHOOLHOUSE BOXES ESTABLISHED.

2185.	Henry L. Higginson School, Harrishof street.
2319.	St. Mary's and Mountfort streets, auxiliary to William McKinley School.
2348.	Boston Public Latin School, Avenue Louis Pasteur.
3518.	Frank V. Thompson School, Maxwell street.
681.	Daniel Webster School, Lubec street.

PRIVATE FIRE ALARM BOXES ESTABLISHED.

245.	Haffenreffer & Co., Bismarck street.
659.	Standard Oil Company, Chelsea street.
7126.	South Boston Dry Dock.

FIRE ALARM BOXES RELOCATED.

2492.	From Pond and Rockwood streets to Pond street and Woodland road.
2616.	From Belgrade avenue and Rexhame street to Belgrade and Colberg avenues.
2621.	From Beech and Newburg streets to Beech street and Colberg avenue.
3184.	From opposite 50 Barry street to Hamilton and Barry streets.
452.	From Medford street, opposite Mystic street to Medford and Pearl streets.
5278.	From North Beacon street and Electric avenue to North Beacon and Vineland streets.
7161.	From West First street, between E and F streets to West First and E streets.

FIRE ALARM BOXES REMOVED FROM SERVICE.

1446.	A. Shuman Company, Washington and Summer streets.
3232.	St. Mary's Infant Asylum.
410.	Jacob Foss School, Adams and Chestnut streets.

FIRE ALARM BOXES IN SERVICE.

Total number	1,299
Owned by Fire Department	916
Owned by Schoolhouse Department	212
Owned by Automatic Fire Alarm Company	61
Privately owned	110

DEPARTMENT BOXES.

On box posts	509
On poles	383
On buildings	19
Inside buildings	5
Equipped with keyless doors (bell ringing attachment),	860
Equipped with keyless doors (glass guards)	49
Equipped with key doors	7
Equipped with auxiliary attachments	15
Designated by red lights	525

SCHOOLHOUSE BOXES.

On box posts	26
On poles	15
On buildings	103
Inside buildings	68
Equipped with keyless doors	156
Equipped with key doors	56
Equipped with auxiliary attachments	168
Designated by red lights	21

AUTOMATIC FIRE ALARM COMPANY BOXES.

On poles	6
On buildings	18
Inside buildings	37
Equipped with keyless doors	9
Equipped with key doors	52

PRIVATE FIRE ALARM BOXES.

On poles	8
On buildings	35
Inside buildings	67
Equipped with keyless doors	15
Equipped with key doors	95
Equipped with auxiliary attachments	11

CLASSIFICATION OF FIRE ALARM BOXES.

Academies	4
Armory	1
Asylums	3

Car houses	11
Cemetery	1
Church	1
City yard	2
Home for aged people	2
Hospitals	21
Hotels	5
Manufacturing plants	27
Museum	1
Navy yard	7
Office buildings	5
Police station	1
Power stations	6
Prison	1
Public hall	1
Pumping station	1
Railroad shops	5
Railroad stations	5
Railroad yards	12
Retail stores	4
Restaurant	1
Schoolhouses (public)	212
Schoolhouses (parochial)	2
Stock yards	2
Street boxes (public) *	905
Theaters	28
Warehouses	9
Wharves	9
Wholesale houses	4

FIRE ALARM BOXES IN DISTRICTS.

District 1	72	District 9	100
District 2	68	District 10	97
District 3	33	District 11	119
District 4	88	District 12	96
District 5	52	District 13	114
District 6	92	District 14	102
District 7	86	District 15	79
District 8	99		

Two boxes are located outside the city limits.

POSTS AND CABLE TERMINAL BOXES.

Box posts in service	535
Box posts set but not in service	8
Cable posts in service (large size)	74
Cable posts in service (small size)	13
Pole cable boxes in service (underground connection)	215

* About one hundred schoolhouse and private boxes are accessible to public but are not counted as street boxes.

CIRCUITS.

Box circuits	66
Tapper circuits	14
Gong circuits	13
Special signal circuits	3
Telephone circuits in department system	53
Telephone circuits to Beach Exchange	9
Telephone circuits to Back Bay Exchange	1
Telephone circuits to Police Headquarters	1
Telephone circuits to A. D. T. Company office	1
Telephone circuits to Edison Electric Illuminating Company	1
Telephone connection to Automatic Fire Alarm Company	1
Telephone connections to Protective Department	1

FIRE ALARM APPARATUS.

Tappers in service	157
Boston tappers in adjacent cities and towns.	6
Tappers connected to adjacent city and town systems in Boston stations	6
Gongs in service	111
Registers in service, excepting those in Fire Alarm Office	30
Relays in service, excepting those in Fire Alarm Office,	21
Telephones in department system	155

WIRES, CABLES AND CONDUITS.

Line wire in service	230 miles
Aerial cable in service	7 miles
Conductors in same	49 miles
Aerial cable conductors in service	23 miles
Underground cable in service	178 miles
Conductors in same	2,468 miles
Underground conductors in service	1,276 miles
Conduits owned by Fire Department	72,384 feet
Ducts in Fire Department conduits	91,335 feet
Ducts used by Fire Department in New England Telephone and Telegraph Company's system	650,920 feet
Ducts used by Fire Department in Postal Telegraph system	5,717 feet

SUMMARY OF WORK DONE.

Line wire used (new work)	43,620 feet
Line wire removed	31,150 feet
Aerial cable installed	5,720 feet
Conductors in same	17,720 feet

Aerial cable removed from service	10,730 feet
Conductors in same	52,940 feet
Underground cable installed in ducts of New England Telephone and Telegraph Com- pany's system	50,296 feet
Conductors in same	430,887 feet
Underground cable installed in Fire Depart- ment ducts	8,662 feet
Conductors in same	60,038 feet
Total underground cable installed (new work), Conductors in same	58,958 feet 490,925 feet
Underground cable replaced	2,868 feet
Conductors in same	87,228 feet
Conduits laid by this department	4,284 feet
Ducts in same	5,759 feet
Ducts abandoned	339 feet
Fire alarm boxes installed by this department	26
Fire alarm boxes installed by Schoolhouse De- partment	5
Fire alarm boxes installed on private property	3
Fire alarm boxes relocated	7
Fire alarm boxes removed from service	3
Box posts set	29
Box posts relocated	8
Box posts reset or replaced by new	23
Cable posts set (large size)	8
Cable posts replaced by new	6
Cable posts removed from service	1
Underground cable boxes on poles installed	23

GEORGE L. FICKETT,
Superintendent.

BUREAU OF SUPPLIES AND REPAIRS.

FROM: THE BUREAU OF SUPPLIES AND REPAIRS.

TO: THE FIRE COMMISSIONER.

SUBJECT: ANNUAL REPORT, 1923-1924.

I herewith submit the annual report of the Bureau of Supplies and Repairs for the year ending January 31, 1924.

During the year extensive repairs and alterations were made at the following places:

Engines 6, 12, 13, 18, 19, 20, 24, 27, 28, 32; Chemical 7; Engine 7, new quarters; Headquarters, elevator installed; Repair shop, boilers overhauled and emergency steam line installed; Fire Alarm shop, sprinkler system installed.

Our corps of outside mechanics in addition to their work done at other quarters performed all incidental finish on department buildings where work was done by contract. (Painting, building hose racks, etc.)

Number of jobs	874
Cost	\$53,497

Some minor repairs were performed in quarters by members, stock being furnished by department.

Cost of stock	\$890
Cost of miscellaneous repairs by outside concerns	12,713

Gasoline tanks of 550-gallon capacity installed at quarters of Engines 7, 27, 32; Ladder 2, 19, 24; Chemical 7.

Small and defective tanks replaced by others of 550 gallon capacity at the following quarters: Engines 14, 22, 42, 45.

Oil burning equipments installed at Engines 4, 5, 6, 7, 9, 15, 22, 25, 28, 48; Ladder 4; Chemical 7; Bureau repair shop.

New house heaters installed at Engines 6, 13, 20.

MOTOR ACTIVITIES.

Thirty-three vehicles purchased, tested and placed in service:

- 10 Pumping engines, American-La France.
- 6 Combination chemical and hose cars, American-La France.
- 2 Aerial ladder trucks, American-La France.
- 6 City service ladder trucks, American-La France.
- 1 Sedan, Buick.
- 1 Coupe, Buick.
- 3 Roadsters, Buick.
- 4 Roadsters, Ford.

NOTE.— Buick and Ford cars were painted department color before going into service.

The following horse-drawn companies were converted to motor companies during the year: Engines 9, 27, 29, 32, 34, 40; Ladders 2, 3, 9, 23, 24, 27.

Motor vehicles painted complete by shop employees during the year:

- 1 Sedan,
- 6 Touring cars.
- 20 Roadsters.
- 1 Fuel wagon.
- 1 Tractor steam engine.
- 3 Hose cars.

By outside concerns:

- 2 Hose cars.
- 2 Ladder trucks.
- 1 Coupe.

Steam engines attached to Christie tractors at Engine 8, 42, 48 condemned. Steam engine 29 attached to Engine 8 tractor and placed in service at Engine 8.

Tractors detached from Engine 42, 48 and placed in reserve.

Engine 8 boiler dismantled, Engine 42, 48 sold.

Body removed from horse-drawn hose wagon 33 and installed on White chassis for use as fuel wagon.

Three Christie motors rebuilt by shop mechanics.

Ten Christie motors rebuilt by outside concern.

Ladder 29 rebuilt and pneumatic tires installed for trial.

On request of the Street Commissioners 18 omnibuses inspected and passed on by the Supervisor of Motor Apparatus.

Perpetual inspection of apparatus is maintained by the Engineer of Motor Apparatus, 2,871 inspections having been made during the year:

2,821 calls responded to by Emergency Motor Squad.
815 chauffeurs' licenses renewed.

Repairs on motor vehicles by shop mechanics:

Number of jobs	4,990
Cost	\$53,520 00
Number of repairs by outside concerns.	1,071
Cost	\$10,056 00

MOTORLESS VEHICLE ACTIVITIES.

With the complete motorization of the department we were left with a considerable amount of horse-drawn apparatus on our hands. Every effort was made to obtain a market for the sale of this apparatus, and after receiving communications from several business concerns and other departments who had been communicated with stating that the apparatus was no use to them, it was deemed advisable to dispose of it at public auction.

This apparatus was taken to the yard of the veterinary hospital where a public auction was held for its disposal by the City Auctioneer.

For our own needs we retained all the hose wagons, six engines and two ladder trucks.

All the horse-drawn coal wagons being of no further use to our department were disposed of at private sales.

The following was turned over to the Institutions Department: Two horse-drawn chemical engines, one horse-drawn ladder truck with ladders, one small pung.

Eleven hose wagons and one ladder truck converted to pungs.

Repairs by shop mechanics	177
Cost	\$1,385 00
By outside concerns	11
Cost	\$2,310 00

MARINE SERVICE.

3 fireboats In service.

House for radio equipment built on deck of Engine 31.

Permission having been obtained from the Government to name our fireboats in commemoration of members of the department who made the supreme sacrifice during the world war, signs bearing the names of these men were made and installed.

Repairs by outside concerns	15
Cost	\$6,351 00

HIGH PRESSURE.

Steam supply pipe at Station No. 1 reduced from 6 inch to 5 inch.

Piezometer gauges furnished to Engines 1, 15, 37, 40, 41, 42.

All companies furnished with high pressure hydrant wrenches.

CHAUFFEUR SCHOOL.

During the year our chauffeur school was uninterruptedly maintained in order to properly instruct members attached to horse-drawn companies prior to motorization.

To assist in this work one man was detailed from the Fire Fighting Force to instruct the members in the care and operation of Christie tractors.

One hundred and sixty-four men were examined and certified as chauffeurs.

MOTOR PUMP SCHOOL.

Our Motor Pump School was in operation from May to October, during which time 13 classes, comprising six to seven men, received instructions.

Eighty-three men qualified for certification as pump operators.

Two members of the Lynn Fire Department received instructions at this school.

MISCELLANEOUS.

All deck guns on apparatus equipped with shut-off valves.

Seven hydrant shower baths made and distributed.
(One sent to Rainsford Island.)

Thawing devices installed on Engines 2, 6, 7, 9, 10, 17, 22, 23, 27, 29, 32, 34, 35, 37, 40, 43, 48, 50.

Material for testing outside connection for sprinkler systems in buildings made up and distributed to the several district headquarters. (This material consisted of short lengths of 2½-inch hose with male couplings attached to one end.)

MOTOR VEHICLES, APPARATUS, ETC., IN SERVICE AND RESERVE.

ENGINES.

MAKE.	Kind.	In Service.	In Reserve.
American-LaFrance.....	Pumpers.....	36	5
Seagrave.....	Pumpers.....	3	
Christie tractors.....	Steam engines.....	10	5
Self-propelled.....	Steam engines.....	1	1

HOSE CARS.

American-LaFrance.....	Combinations.....	26	3
Seagrave.....	Combinations.....	11	2
Velie.....	Combinations.....	1	
Mack.....	Hose car.....	1	

LADDER TRUCKS.

American-LaFrance.....	Aerial.....	9	
Seagrave.....	Aerial.....	1	
Christie tractor.....	Aerial.....	2	3
Christie tractor.....	City service.....	6	3
American-LaFrance.....	City service.....	12	

WATER TOWERS.

American and British tractors.....	3	1
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CHIEF OFFICERS' CARS.

Buick.....	Sedan.....	1	
Buick.....	Coupe.....	1	
Buick.....	Touring cars.....	8	1
Buick.....	Roadsters.....	20	6

MISCELLANEOUS.

MAKE.	Kind.	In Service.	In Reserve.
American-LaFrance.....	School car.....	1	
Pierce Arrow.....	Rescue Company.....	1	
Christie.....	Tractors.....		2
Mack.....	Cable car.....	1	
Mack.....	Fuel car.....	1	
Mack.....	Wrecking car.....	1	
White.....	Commercial trucks.....	3	
White.....	Fuel car.....	1	
Ford.....	Runabouts.....	4	
Ford.....	Emergency cars.....	4	
Ford.....	Truck (Wire Division)...	1	
Knox.....	Hose car.....	Unserviceable.	

HOSE.

<i>Purchased.</i>		<i>Condemned.</i>	
	Feet.		Feet.
Leading cotton hose . . .	13,000	Leading cotton hose . . .	13,150
Chemical hose . . .	500	Leading rubber hose . . .	400
1-inch rubber deck hose . . .	100	Chemical hose . . .	450
		4-inch rubber suction hose,	210
Total	<u>13,600</u>	3-inch flexible suction hose,	200
		3½-inch deluge hose . . .	87½
		Total	<u>14,497½</u>

Amount of hose in use and in stock February 1, 1924.

<i>In Use.</i>		<i>In Stock.</i>	
	Feet.		Feet.
Leading cotton hose . . .	137,066	Leading cotton hose . . .	5,850
Leading rubber hose . . .	200	Chemical hose . . .	1,400
Chemical hose . . .	17,300	Deluge hose . . .	12½
1-inch rubber deck hose . . .	900	4-inch rubber suction hose,	294
3-inch flexible suction hose,	800	2½-inch rubber suction hose,	40
4-inch rubber suction hose,	1,232		
Deluge hose	662	Total	<u>7,596½</u>
Total	<u>158,160</u>		

Amount of hose repaired during the year.

	Feet.
1-inch rubber hose . . .	100
2½-inch rubber hose . . .	100
2½-inch cotton hose . . .	18,300
3-inch cotton hose . . .	4,650
3½-inch cotton hose . . .	50
¾-inch chemical hose . . .	1,600
Total	<u>24,800</u>

CLOTHING.

KIND.	Received and Distributed.	Repaired.	Reissued.
Trousers.....	1,103	339	10
Sack coats.....	583	138	31
Overcoats.....	122	69	11
Reefers.....	32	.....	.....
Rubber coats.....	304	132	11
Caps.....	727	.....	.....
Fire hats.....	50	278	.....

One thousand one hundred and thirty-eight overcoats and twenty-four reefers cleansed, pressed and placed in storage during the summer.

GASOLENE STATIONS.

DIVISION No. 1.

DISTRICTS.	Location.	Capacity (Gallons).	Pump.
1.....	Engine 5.....	280	1 gallon.
1.....	Engine 11.....	110	1 gallon.
1.....	Ladder 2.....	550	1 gallon.
1.....	Chemical 7.....	550	1 gallon.
2.....	Engine 27.....	550	1 gallon.
2.....	Engine 32.....	550	1 gallon.
2.....	Engine 36.....	280	1 gallon.
2.....	Engine 50.....	280	1 gallon.
2.....	Ladder 9.....	220	1 quart.
3.....	Ladder 8.....	120	1 gallon.
3.....	Ladder 18.....	280	1 gallon.
3.....	Engine 39.....	280	1 gallon.
4.....	Engine 4.....	280	1 gallon.
4.....	Engine 6.....	280	1 gallon.
4.....	Engine 8.....	280	1 gallon.
4.....	Ladder 1.....	280	1 gallon.
4.....	Ladder 24.....	550	1 gallon.
5.....	Engine 7.....	550	1 gallon.
5.....	Engine 10.....	220	1 quart.
5.....	Engine 26.....	280	1 gallon.
5.....	Ladder 17.....	280	1 gallon.
5.....	Rescue 1.....	550	1 gallon.

DIVISION 2.

DISTRICTS.	Location.	Capacity (Gallons).	Pump.
6.....	Engine 1.....	280	1 gallon.
6.....	Engine 2.....	280	1 gallon.
6.....	Engine 15.....	280	1 gallon.
6.....	Engine 43.....	280	1 gallon.
6.....	Ladder 19.....	550	1 gallon.
7.....	Engine 3.....	280	1 gallon.
7.....	Engine 22.....	550	1 gallon.
7.....	Engine 33.....	280	1 gallon.
7.....	Bristol street, repair shop.....	550	1 gallon.
7.....	Wareham street garage.....	280	1 gallon.
8.....	Engine 13.....	550	1 gallon.
8.....	Engine 14.....	550	1 gallon.
8.....	Engine 37.....	120	1 gallon.
8.....	Ladder 12.....	280	1 gallon.
11.....	Engine 29.....	280	1 gallon.
11.....	Engine 34.....	280	1 gallon.
11.....	Engine 41.....	280	1 gallon.
11.....	Engine 51.....	280	1 gallon.

DIVISION 3.

DISTRICTS.	Location.	Capacity (Gallons).	Pump.
9.....	Engine 12.....	550	1 gallon
9.....	Engine 21.....	280	1 gallon.
9.....	Engine 23.....	280	1 gallon
9.....	Engine 24.....	550	1 gallon.
9.....	Ladder 4.....	120	1 gallon.
10.....	Engine 17.....	280	1 gallon.
10.....	Engine 18.....	280	1 gallon.
10.....	Engine 52.....	280	1 quart.
12.....	Engine 28.....	280	1 gallon.
12.....	Engine 42.....	550	1 gallon.
12.....	Ladder 23.....	220	1 quart.
13.....	Engine 30.....	280	1 gallon.
13.....	Engine 45.....	550	1 gallon.
13.....	Engine 53.....	120	1 gallon.
14.....	Engine 20.....	280	1 gallon.
14.....	Engine 46.....	220	1 gallon.
14.....	Ladder 6.....	280	1 gallon.
15.....	Engine 19.....	280	1 gallon.
15.....	Engine 48.....	280	1 gallon.
15.....	Engine 49.....	280	1 gallon.

Provisions have been made for the installation of gasoline tanks of large capacity at the new quarters now under construction for Engine Companies 31 and 40.

CANNEL COAL STATIONS.

DIVISION 1.

DISTRICT	LOCATION.	Capacity. (Tons.)
1.....	Engine 11.....	12
1.....	Chemical 7.....	20
2.....	Ladder 9.....	35
3.....	Ladder 18.....	10
4.....	Ladder 24.....	16
5.....	Rescue 1.....	35

DIVISION 2.

6.....	Engine 2.....	20
6.....	Fourth street.....	40
7.....	Engine 33.....	25
8.....	Engine 13.....	40
8.....	Engine 14.....	10
8.....	Engine 37.....	20
11.....	Engine 29.....	7
11.....	Engine 34.....	7
11.....	Engine 41.....	10
11.....	Engine 51.....	10

DIVISION 3.

9.....	Engine 12.....	5
9.....	Engine 21.....	6
9.....	Engine 23.....	5
9.....	Engine 24.....	7
10.....	Engine 18.....	5
12.....	Engine 28.....	20
13.....	Engine 30.....	9
13.....	Engine 45.....	9
14.....	Engine 16.....	5
14.....	Engine 20.....	7
15.....	Engine 19.....	8
15.....	Engine 48.....	10

ENGINES.

NUMBER.	Built by	Put in Service.	Rebuilt by	Date.	Diameter of Cylinder.	Diameter of Pump.	Stroke.	Size.	Weight. (Pounds.)
1.....	American-LaFrance 1,000-gallon pump.	Dec. 19, 1921	.....	.....	5½	.....	6	First.	11,500
2.....	Seagrave triple combination pump, 750 gallons.	June 29, 1917	.....	.....	5½	.....	6½	Second.	13,500
3.....	{ Christie Tractor..... { Manchester Locomotive Company...	{ June 16, 1917 { Jan., 1904	.....	.....	7½	4½	8	Second.	13,140
4.....	{ Christie Tractor..... { Amoskeag Manufacturing Company,	{ June 16, 1917 { 1911	.....	.....	7½	4½	8	Second.	14,308
5.....	American-LaFrance 1,000-gallon pump.	Jan., 1919	.....	.....	5½	.....	6	First.	11,300
6.....	American-LaFrance 750-gallon pump,	July 13, 1922	.....	.....	5½	.....	6	Second.	11,030
7.....	American-LaFrance 1,000-gallon pump.	Aug. 10, 1922	.....	.....	5½	.....	6	First.	11,300
8.....	{ Christie Tractor..... { Amoskeag Manufacturing Company,	{ July 5, 1917 { May, 1911	.....	.....	7½	4½	8	Second.	13,140
9.....	American-LaFrance 750-gallon pump,	July 24, 1923	.....	.....	5½	.....	6	Second.	11,030
10.....	American-LaFrance 1,000-gallon pump.	Sept. 8, 1920	.....	.....	5½	.....	6	First.	11,300
11.....	American-LaFrance 750-gallon pump,	Jan. 8, 1923	.....	.....	5½	.....	6	Second.	11,030
12.....	American-LaFrance 750-gallon pump,	July 19, 1922	.....	.....	5½	.....	6	Second.	11,030

13.	American-LaFrance 750-gallon pump.	Aug. 1, 1922	.....	5½	.....	6	Second.	11,030
14.	American-LaFrance 750-gallon pump.	Dec. 19, 1921	.....	5½	.....	6	Second.	11,030
15.	{Christie Tractor..... Amoskeag Manufacturing Company,	July 30, 1920) Dec., 1904	.....	8½	5	8	First.	14,350
16.	American-LaFrance 750-gallon pump.	Oct. 19, 1921	.....	5½	.....	6	Second.	11,030
17.	American-LaFrance 750-gallon pump.	Aug. 14, 1923	.....	5½	.....	6	Second.	11,030
18.	American-LaFrance 750-gallon pump.	Oct. 28, 1921	.....	5½	.....	6	Second.	11,030
19.	Seagrave triple combination 750-gal- lon pump.	July 2, 1917	.....	5½	.....	6½	Second.	13,500
20.	American-LaFrance 750 gallon pump.	Oct. 29, 1921	.....	5½	.....	6	Second.	11,030
21.	{Christie Tractor..... Amoskeag Manufacturing Company,	Jan. 12, 1916) Sept., 1870)	.....	7½	4½	8	Second.	12,500
22.	American-LaFrance 750-gallon pump.	Nov. 20, 1920	.....	5½	.....	6	Second.	11,030
23.	American-LaFrance 1,000-gallon pump.	May 1920	.....	5½	.....	6	First.	11,300
24.	American-LaFrance 750-gallon pump.	July 21, 1922	.....	5½	.....	6	Second.	11,030
25.	{Christie Tractor..... American-LaFrance Company.....	May 15, 1915) Dec. 1910)	.....	9	5½	8	First.	16,000
26.	American-LaFrance 1,000-gallon pump.	Dec. 20, 1920	.....	5½	.....	6	First.	11,300
27.	American-LaFrance 750-gallon pump.	July 17, 1923	.....	5½	.....	6	Second.	11,030
28.	American-LaFrance 750-gallon pump.	Apr. 13, 1920	.....	5½	.....	6	Second.	11,030
29.	American-LaFrance 750-gallon pump.	Sept. 19, 1923	.....	5½	.....	6	Second.	11,030
30.	American-LaFrance 750-gallon pump.	Oct. 18, 1921	.....	5½	.....	6	Second.	11,030

Engines.—Concluded.

NUMBER.	Built by	Put in Service.	Rebuilt by	Date.	Diameter of Cylinder.	Diameter of Pump.	Stroke.	Size.	Weight. (Pounds.)
31.....	G. F. Blake Manufacturing Company.	1914	.....	.....	17	10	11	1 pump, 3,000 gallons.	104 tons.
32.....	American-LaFrance 750-gallon pump.	Oct. 18, 1920	.....	.....	5½	.....	6	Second.	11,030
33.....	{ Christie Tractor.....	April 11, 1921	.....	.....	8½	5½	8	First.	14,240
	{ International Power Company.....	Feb., 1909	.....	.....			
34.....	American-LaFrance 750-gallon pump.	Aug. 6, 1923	.....	.....	5½	.....	6	Second.	11,030
35.....	American-LaFrance 750-gallon pump.	Dec. 10, 1920	.....	.....	5½	.....	6	Second.	11,030
36.....	{ Christie Tractor.....	Aug. 13, 1917	.....	.....	8½	5½	8	First.	13,910
	{ International Power Company.....	Nov., 1909	.....	.....			
37.....	American-LaFrance 750-gallon pump.	July 13, 1923	.....	.....	5½	.....	6	Second.	11,030
38.....	Manchester Locomotive Works (self-propeller).	June 1897	J. B. Filleul & Son.....	1917	9½	5½	8	Double extra first.	18,170
39.....	{ Christie Tractor.....	May 10, 1917	.....	.....	8½	5	8	First.	14,300
	{ Manchester Locomotive Works.....	June, 1901	American-British Company.....	1915					
40.....	American-LaFrance 750-gallon pump.	July 24, 1923	.....	.....	5½	.....	6	Second.	11,030
41.....	American-LaFrance 750-gallon pump.	Jan. 26, 1921	.....	.....	5½	.....	6	Second.	11,030
42.....	{ Christie Tractor.....	Sept. 17, 1920	.....	.....	7½	4½	8	Second.	13,000
	{ Amoskeag Manufacturing Company,	1865	.....	.....			

43.....	American-LaFrance 750-gallon pump,	Jan. 8, 1923	.....	5½	.....	6	Second.	11,030
44.....	American Fire Engine Company.....	Aug., 1895	.....	{ 12½ H. P. 18 L. P. }	{ 10	11	{ 2 sets of pumps, 6,000 gallons.	178 tons.
45.....	American-LaFrance 750-gallon pump,	Jan. 13, 1923	.....	5½	.....	6	Second.	11,030
46.....	American-LaFrance 750-gallon pump,	Oct. 25, 1920	.....	5½	.....	6	Second.	11,030
47.....	G. F. Blake Manufacturing Com- pany.	Aug., 1909	.....	{ 12 H. P. 22 L. P. }	{ 10	11	{ 2 sets of pumps, 6,000 gallons.	179 tons.
48.....	American-LaFrance 750-gallon pump,	Sept. 12, 1922	.....	5½	.....	6	Second.	11,030
49.....	American-LaFrance triple combina- tion 750-gallon pump.	Aug. 9, 1922	.....	5½	.....	6	Second.	12,000
50.....	American-LaFrance 1,000 gallon pump.	1919	.....	5½	.....	6	First.	11,300
51.....	American-LaFrance triple combina- tion 750-gallon pump.	July 12, 1920	.....	5½	.....	6	Second.	11,030
52.....	American-LaFrance 750-gallon pump,	Dec. 19, 1921	.....	5½	.....	6	Second.	11,030
53.....	Seagrave triple combination 750 gal- lon pump.	Aug. 12, 1916	.....	5½	.....	6½	Second.	13,500

Engines in Reserve.

NUMBER.	Built by	Put in Service.	Rebuilt by	Date.	Diameter of Cylinder.	Diameter of Pump.	Stroke.	Size.	Weight. (Pounds.)
105-T....	Christie Tractor. (International Power Company.)	{Mar. 27, 1915} {Feb., 1909}	.....	.....	7½	4½	8	Second.	12,400
107-T....	Christie Tractor. (International Power Company.)	{July 28, 1915 {Feb., 1909}	.....	.....	7½	4½	8	Second.	13,150
108-T....	Christie Tractor. (Amoskeag Manufacturing Company.)	{Dec. 20, 1915 {Nov., 1867}	American Locomotive Company,	1904	7½	4½	8	Second.	12,980
109-T....	Christie Tractor. (Amoskeag Manufacturing Company.)	{Jan. 7, 1916 {1782}	International Power Company...	1907	7½	4½	8	Second.	12,380
113-T....	Christie Tractor. American Locomotive Works.	July, 1903	Manchester Locomotive Works.	1916	8½	5	8	First.	14,240
119-T....	Christie Tractor. (International Power Company.)	{Aug. 13, 1917 {Nov., 1909}	.....	.....	8½	5	8	First.	13,910
100-P....	American-LaFrance, triple combination.	July 3, 1914	.....	.....	5½	.....	6	Second.	11,200
101-P....	American-LaFrance, triple combination.	Aug. 2, 1914	.....	.....	5½	.....	6	Second.	11,200
160-P....	American-LaFrance, 750-gallon pump.	Aug. 31, 1923	.....	.....	5½	.....	6	Second.	11,030
162-P....	American-LaFrance, 750-gallon pump.	Aug. 31, 1923	.....	.....	5½	.....	6	Second.	11,030
163-P....	American-LaFrance, 750-gallon pump.	Aug. 31, 1923	.....	.....	5½	.....	6	Second.	11,030
35.....	Manchester Locomotive Works (self-propeller.)	June, 1897	.....	.....	9½	5½	8	Double extra, first.	18,170

Hose Wagons (in Reserve).

Two (2) Seagrave combination chemical and hose cars (motor).
 Three (3) American-LaFrance combination chemical and hose cars (motor).

LADDER TRUCKS.

NUMBER.	Built by	Put in Service.	Rebuilt by	Feet of Ladders.	Number of Ladders.	Weight. (Pounds.)
1.....	American-LaFrance, Type 17, 4-wheel tractor (75-foot).....	May 27, 1922	.....	354	Aerial.	23,030
2.....	American-LaFrance, Type 17, 4-wheel tractor (75-foot).....	Oct. 15, 1923	.....	354.	Aerial.	17,000
3.....	{Christie tractor..... Fire Department Repair Shop.....}	Dec. 21, 1915 Sept., 1888	.....	268	10	13,440
4.....	American-LaFrance, Type 25 (85 foot).....	Sept. 28, 1914	.....	354	Aerial.	21,040
5.....	Seagrave Company (75-foot).....	June 20, 1917	.....	309	Aerial.	25,130
6.....	{Christie tractor..... C. N. Perkins & Co.....}	March 2, 1917 Aug., 1905	.....	207	8	13,400
7.....	American-LaFrance, Type 14.....	Aug. 14, 1923	.....	254	9	11,000
8.....	{American-LaFrance, Type 17..... Seagrave Company (85-foot).....}	Oct. 31, 1921 Jan. 26, 1915	.....	394	Aerial.	20,000
9.....	American-LaFrance, Type 17, 4-wheel tractor (75-foot).....	Oct. 17, 1923	.....	354	Aerial.	17,000
10.....	American-LaFrance, Type 14.....	Oct., 1920	.....	302	11	11,000
11.....	American-LaFrance, Type 14.....	Dec. 13, 1912	.....	281	10	11,000
12.....	American-LaFrance, Type 31 (75-foot).....	Nov. 8, 1919	.....	335	Aerial.	17,000
13.....	American-LaFrance, Type 31 (85-foot).....	Oct. 1, 1919	.....	294	Aerial.	20,000
14.....	American-LaFrance, Type 31 (85-foot).....	May, 1919	.....	346	Aerial.	20,000
15.....	American-LaFrance, Type 31 (85-foot).....	Jan. 11, 1920	.....	352	Aerial.	20,000
16.....	American-LaFrance, Type 14.....	Sept. 18, 1923	.....	268	10	11,000

Ladder Trucks.—Concluded.

NUMBER.	Rebuilt by	Put in Service.	Rebuilt by	Feet of Ladders.	Number of Ladders.	Weight. (Pounds.)
17.....	{Christie Tractor..... {Seagrave Company (75-foot).....	{July 27, 1915	.....	323	Aerial.	17,100
18.....	{Christie Tractor..... {Seagrave Company (85-foot).....	{May 21, 1915	.....	340	Aerial.	17,225
19.....	American-LaFrance, Type 14.....	Oct. 5, 1923	.....	172	8	11,000
20.....	{Christie Tractor..... {Charles N. Perkins Company.....	{Oct. 27, 1915	.....	247	10	13,400
21.....	American-LaFrance, Type 14.....	Dec. 10, 1913	.....	243	9	11,500
22.....	{Christie Tractor..... {Charles T. Holloway.....	{June 11, 1917	.....	209	8	13,500
23.....	American-LaFrance, Type 14.....	Aug. 20, 1923	.....	268	11	11,000
24.....	American-LaFrance, Type 14.....	Oct. 18, 1923	.....	228	9	11,000
25.....	{Christie Tractor..... {Charles T. Holloway.....	{April 24, 1917	.....	177	8	13,440
26.....	{Christie Tractor..... {Charles N. Perkins.....	{Aug. 10, 1922	.....	213	8	13,500
27.....	American-LaFrance, Type 14.....	Sept. 28, 1923	.....	261	9	11,000
28.....	American-LaFrance, Type 14.....	Nov., 1920	.....	272	10	11,000
29.....	American-LaFrance, Type 14.....	May 15, 1913	Department Repair Shop.....	274	11	11,000
30.....	American-LaFrance, Type 14.....	Jan. 23, 1913	.....	257	10	11,000

In Reserve.

NUMBER.	Built by	Date.	Weight. (Pounds.)
213-T.....	{ Christie Tractor..... { Charles T. Holloway.....	{ 1898	12,050
215-T.....	{ Christie Tractor..... { Fire Department Repair Shop.....	{ 1888	13,440
216-T.....	{ Christie Tractor..... { Hunneman & Co.....	{ 1874	12,050
209-T.....	{ Christie Tractor..... { American-LaFrance Company (75-foot aerial).....	{ 1915	17,530
220-T.....	{ Christie Tractor..... { American-LaFrance Company (85-foot aerial).....	{ 1917	18,000
223-T.....	{ Christie Tractor..... { American-LaFrance Company (85-foot aerial).....	{ 1917	17,660

CHEMICAL ENGINES.

NUMBER.	Built by	Put in Service.	Remarks.	Capacity.	Weight.
7.....	Seagrave Company.....	Feb. 5, 1917	Combination, motor driven.....	Gallons. 35	Pounds. 9,310

SPARE HORSE-DRAWN APPARATUS.

Six (6) steam engines. One (1) hose wagon. One (1) ladder truck.

WATER TOWERS.

NUMBER.	Built by	Put in Service.	Weight. (Pounds.)
1.....	American LaFrance Company.....	Oct., 30, 1912	14,600
2.....	Kansas City Fire Department Supply Company.....	May 17, 1890	10,000
3.....	International Company.....	Nov. 2, 1903	12,050
4 (Reserve).....	Kansas City Fire Department Supply Company.....	Dec. 18, 1893	10,000

Towers are equipped with American-British Company tractors.

TOOLS AND MACHINERY IN REPAIR SHOP.

Blacksmith Shop.	Boiler Room.	Hose and Harness Shop.	Engine Room.	Wheelwright and Machine Shop.
5 forges. 1 power hammer. 1 gas tire heater. 1 tire upsetter. 1 punch and shears. 1 lever shears. 1 tire roller. 2 rubber tire setters. 1 bolt cutter. 1 fan blower. 1 power hack saw.	3 vertical tubular boilers, each 75 horse power. 2 Blake boiler feed pumps.	1 Buckley electric hose test- ing and expanding engine. 2 electrically-driven sewing machines. Numerous tools and appli- cances for repairing hose and harnesses.	1 25 horse power steam en- gine cylinder, 9 by 31. 1 Knowles triplex pump for hose testing. 1 15 horse power motor. 2 dynamos and engines which supply current to fire alarm and central station. 1 Richardson-Phenix motor oil purifier (Model L).	1 each engine lathe, with foot beds 28 by 12; 16 by 12; 16 by 9; 14 by 8 and 14 by 6. 1 16 by 10 speed lathe. 1 16 by 10 wood lathe. 126 by 26 planer, 8-foot bed. 1 planer, 16 by 29, shaper. 1 radial drill. 3 upright drills. 1 wall drill. 1 circular saw. 1 band saw. 1 boring and mortising machine. 2 buzz planers. 1 grindstone. Numerous small tools. 1 Brown & Sharpe universal milling machine. 1 motor-driven valve grinding machine.

Also tools for the repair of automobile apparatus.

CONCLUSION.

On account of repairs at several of our fire stations it was necessary to remove the supply of cannel coal from same thereby eliminating the use of these quarters as coal depots.

A sufficient amount of this coal has been retained in each district for supplying steam engines in case of emergency.

The coal shed at the quarters of Engine 36 having become dilapidated, I would recommend that it be torn down.

Respectfully submitted,

WILLIAM H. McCORKLE,
District Chief.

REPORT OF MEDICAL EXAMINER.

BOSTON, January 31, 1924.

FROM: THE MEDICAL EXAMINER.
 TO: THE FIRE COMMISSIONER.
 SUBJECT: ANNUAL REPORT.

I respectfully submit the following report for the year ending January 31, 1924:

Number of cases of illness on file	399
Number of cases of injury on file	1,673
Number of injured (but remained on duty) on file	1,273

EXAMINATIONS.

Inspections and examinations at headquarters recorded	1,815
For appointment as provisional firemen (civil service),	262
For appointment to Fire Alarm Branch.	4
For appointment of men on probation	50
At engine houses of firemen, pulmotors, medicine chests, and visits at homes of firemen either sick or injured and at hospitals	1,040

The general health of the firemen during the past year has been excellent and the books show a decrease of 170 men on sick leave from the previous year. The above fact is worthy of interest and gratifying as the great decrease in illness was obtained, notwithstanding a notable increase in the fire-fighting force; on the other hand, the number injured shows an increase of 339 over and above the number recorded as of the previous year, due in a measure to a greater number of fires experienced, consuming material dangerous to health and difficult to handle and endure.

The officers and men deserve credit for the prompt and eager spirit displayed in rendering "first aid" at all times when summoned. It is also praiseworthy to note and shows a keen regard for faithful service, that out of 1,673 cases of injury on file 1,273 men remained on duty and had their injuries treated in quarters.

DEATHS.

Dennis J. Burnett (Fire Alarm Branch), February 10, 1923, cerebro-spinal meningitis.

James J. Caine (District Chief No. 6), March 16, 1923, chronic interstitial myocarditis.

Timothy F. Holland (Wire Division), June 23, 1923, heart disease and pneumonia.

J. Paul Haynes (Wire Division), June 4, 1923, pneumonia.

Respectfully submitted,

WILLIAM J. McNALLY, M. D.,
Medical Examiner.

REPORT OF WIRE DIVISION.

Boston, January 31, 1924.

FROM: SUPERINTENDENT, WIRE DIVISION.

TO: THE FIRE COMMISSIONER.

SUBJECT: ANNUAL REPORT.

I herewith submit annual report of the Wire Division of the Fire Department for the year 1923-24.

The underground district for 1923-24 was prescribed and advertised in accordance with the law.

During the year there were fifty fires and three accidents (one fatal) due to electrical causes. The total of fire losses in so far as could be determined was \$17,906.34. Thorough investigations of the above fires and accidents were made by members of this Division, and complete reports made of the same.

Rigid inspections have been made of old and new electrical construction during the year.

The total income was \$69,786.80.

EXTERIOR DIVISION.

The underground district for the year 1923 as prescribed under authority of chapter 196 of the Acts of 1921, comprised the following streets:

BRIGHTON.

Washington street, from Cambridge street to Commonwealth avenue.

CHARLESTOWN.

Alford street, from Main street to the drawbridge.

Medford street, from Chelsea street to Cook street.

DORCHESTER.

Alban street, from Welles avenue to Ashmont street.

Talbot avenue, from Washington street to Bernard street.

Quincy street, from Columbia road to Blue Hill avenue.

Adams street, from King square to Minot street.

Washington street, from Ashmont street a distance of 1,970 feet, to a point within 530 feet of Codman street.

SOUTH BOSTON.

Macallen street, from Dorchester avenue to Foundry street.

Making a total distance of 4 miles as provided by law.

In these prescribed streets, from which poles and overhead wires were to be removed, there were standing on February 1, 1923, a total of two hundred and sixteen (216) poles (not including the trolley poles of the Boston Elevated Railway which are exempt) owned by the Edison Electric Illuminating Company, New England Telephone and Telegraph Company, Charlestown Gas and Electric Company, and Postal Telegraph Cable Company, supporting a total of one million seven hundred fifty-four thousand (1,754,000) feet of overhead wires, or a little more than three hundred and thirty-two (332) miles owned by the Edison Electric Illuminating Company, New England Telephone and Telegraph Company, Boston Elevated Railway Company, Postal Telegraph Cable Company, Charlestown Gas and Electric Company, Boston Fire Department (Fire Alarm Branch), and Boston Police Department (Police Signal Service).

In the selection of new pole locations our engineers have accompanied the engineers of the various companies for the purpose of passing on such locations. All carrying poles standing in the streets are stencilled by this department for purposes of identification and are plotted in atlases on file in our office. All carrying poles standing in the streets are inspected and tested yearly by the inspectors of this division and at the same time a general inspection is made of all overhead construction. This work is in addition to the regular inspection work necessary on account of new construction. Poles found to be leaning or in process of decay are reported to the companies owning same and where conditions warrant it, poles are condemned. During the past year the inspectors of this division reported one hundred and twenty-eight (128) poles decayed at base and twenty-nine (29) poles leaning or a total of one hundred and fifty-seven (157) poles which were replaced by new poles or reset by the various companies at the request of this department. Seven (7) abandoned poles were also reported by our inspectors and were removed by the various companies at our request.

The following table shows the overhead work for the year from February 1, 1923, to January 31, 1924, inclusive:

Number of new poles set in new locations	527
Number of poles replaced, reset or straightened	648
Number of poles removed	133
Number of poles now standing in the public streets,	16,266
Number of defects reported	3,263
Number of defects corrected	3,058
(Other defects in process of correction.)	
Number of notices of overhead construction	25,714
Number of overhead inspections	40,526
Number of overhead reports	26,825
Amount of overhead wires removed by owners (in feet)	1,645,692

UNDERGROUND CONSTRUCTION.

The ducts used this year for the underground conduits of the drawing-in system are of the following type:

1. Vitrified clay (laid in concrete).
2. Fiber (laid in concrete).
3. Iron.
4. Wood.

In side or residential streets a considerable amount of special underground construction for electric light and power purposes, of a type known as the "Split Fiber Solid System," has been installed during the year.

The electrical approval for underground electric construction numbered four thousand seven hundred and five (4,705).

Number of inspections of underground electrical construction, nine thousand five hundred eighty-two (9,582).

Number of reports of underground electrical construction, four thousand four hundred thirty-four (4,434).

Character of Cable Used by the Various Companies.

COMPANY.	Kind of Insulation.	Size.
Boston Elevated Railway Company.	Rubber.....	500,000 and 1,000,000 C. M.
Charlestown Gas and Electric Company.	Varnished cambric, paper and rubber.	Nos. 6, 4, 2, 1-0, 2-0, 4-0.
Edison Electric Illuminating Company.	Rubber and paper...	Nos. 8 to 1,000,000 C. M.
Fire Alarm Branch (B. F. D.).....	Rubber.....	4, 6, 10, 15 conductor.
New England Telephone and Telegraph Company.	Paper, silk and cotton,	2 to 1212 pair.
Police Signal Service (B. P. D.)....	Rubber.....	7 conductor.
Postal Telegraph Cable Company..	Paper.....	2 to 30 conductor.
Schoolhouse Commission (City of Boston)	Rubber.....	4 conductor.
Western Union Telegraph Company,	Paper.....	11 to 100 pair.

Table Showing Underground Work for the Year 1923.

COMPANY.	Feet of Conduit.	Feet of Duct.	Feet of Cable.	Number of Manholes.	Number of Services.
Boston Elevated Railway Company,	8,500	64,290	15,519	18	
Boston Low Tension Wire Association.		283			4
Charlestown Gas and Electric Company.	9,643	53,516	90,736	27	34
Edison Electric Illuminating Company.	179,712	364,812	1,189,964	264	2,419
Fire Alarm Branch (B. F. D.)		1,449	55,200		29
New England Telephone and Telegraph Company.	59,847	479,030	346,777	147	138
Park Department (City of Boston)	119	228			1
Police Signal Service (B. F. D.)		160	7,500		1
Postal Telegraph Cable Company.		175	1,650		2
Schoolhouse Commission (City of Boston).	345	960	3,420		5
Western Union Telegraph Company.	5,410	26,310	13,500	6	15
Totals.	263,576	991,213	1,724,266	462	2,648

NOTE.—“Split Fiber Solid Main System” of the Edison Electric Illuminating Company is included in the above figures comprising 52,035 feet of conduit and 99,787 feet of duct. The main and feeder tube or armored cable of the “old solid system” of the same company are not included. Work on the “old solid system” comprised 133 service connections and 4,691 feet of No. 100 three-conductor armored cable.

Table Showing the Amount and Distribution of Boston's Electrical Power January 31, 1924.

COMPANY.	Total Rated Horse Power of Boilers.	Total Rated Horse Power of Engines.	Capacity of Incandescent Lamps in Kilowatts.	Capacity of Arc Lamps in Kilowatts.	Kilowatts of Motors.	Kilowatts, Mixed Loads.	Number of Stations.
Boston Elevated Railway Company . . .	46,702	205,453	3,613	2	355,330	86,245	17
Edison Electric Illuminating Company..	51,508	275,400	115,220	2,976	96,802	86,785	47
Charlestown Gas and Electric Company,			1,500	165	1,500	300	1
Block Plant Electric Light Company . . .	400	325	50		15	15	1
A. W. Barnes Steam Specialty Company,	620	400	125		106		1
Sudbury Building Plant.	200	150	25		20		1
Hanover Street Trust.	500	363	140	10	80	230	1
Totals.	99,930	482,091	120,673	3,153	453,853	173,575	69

INTERIOR DIVISION.

As provided by law there have been twelve hundred eighty-nine (1,289) inspections made of theaters, places of amusement and public halls. Wherever defects were reported interested parties were immediately notified to attend to the same.

During the year there were fifty fires and three accidents to persons caused by electricity, one of the accidents proving to be fatal.

Fires in interior of buildings	41
Fires on poles	9
Injuries to persons	3
Notices of new work received	20,355
Number of permits to turn on current	15,030
Number of incandescent lamps inspected . .	1,644,393
Number of motors inspected	10,043
Number of buildings in which wiring was completely examined	4,108
Number of inspections made	38,113

All defects reported have been corrected or are in process of correction.

LIST OF WIRE DIVISION EMPLOYEES,
JANUARY 31, 1924.

	Salary Per Annum.
1 Superintendent	\$3,500
1 Chief Inspector	2,500
10 Inspectors	2,000
8 Inspectors	1,900
5 Inspectors	1,800
5 Inspectors	1,700
1 Inspector	1,600
3 Inspectors	1,500
1 Engineer	2,000
1 Chief Clerk	2,000
1 Assistant Chief Clerk	2,000
1 Clerk and Stenographer	1,700
1 Clerk	1,500
1 Clerk	1,240
3 Stenographers	1,400
1 Chauffeur	1,400
1 Stenciller	1,400

STATEMENT OF APPROPRIATION AND EXPEN-
DITURES FROM FEBRUARY 1, 1923, TO
JANUARY 31, 1924, INCLUSIVE.

Appropriation	\$90,740 23
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EXPENDITURES.

A-1.	Employees	\$80,801 65
F-7.	Pensions	600 00
B-1.	Printing and binding	929 00
B-2.	Postage	220 00
B-3.	Advertising	126 70
B-4.	Car fares	2,849 22
B-12.	Premium on bond	6 00
B-13.	Telephones	297 21
B-14.	Auto painting	50 00
B-35.	Auto fees	2 00
B-37.	Photo, etc	2 10
B-39.	Repairs, etc.	20 85
C-9.	Metal desks	1,162 30
C-13.	Tools, etc.	33 95
D-1.	Office forms, etc.	1,790 60
D-11.	Gasolene, etc.	381 95
D-16.	Photo material	2 65
E-10.	Batteries	9 90
E-13.	Paint stock, etc.	25 62

Total expenditures	\$89,311 70
Balance in treasury	1,428 53

\$90,740 23

LIST OF PROPERTY.— WIRE DIVISION.

-
- 1 1,500-volt Weston Direct Current Voltmeter.
 - 5 300-volt Weston Direct Current Voltmeters.
 - 2 300-volt Weston Alternating Current and Direct Current Voltmeters.
 - 1 15-volt Weston Direct Current Voltmeter.
 - 2 300-volt Weston Direct Current Double Reading Voltmeter.
 - 1 120-volt Weston Direct Current Miniature Type Voltmeter.
 - 1 150-volt Weston Direct Current Miniature Type Voltmeter.
 - 1 500-volt Weston Direct Current Ammeter.
 - 1 200-volt Weston Alternating Current Ammeter.
 - 1 50-volt Weston Direct Current Ammeter.
 - 1 15-volt Weston Alternating Current Ammeter.
 - 1 1,500-volt Milamperes Weston Direct Current Mil-ammeter.
 - 6 Bichloride of silver batteries, each 60 cells.
 - 1 Queen testing set.
 - 1 Touring car.
 - 1 Runabout.
 - 1 Ford truck.
 - 1 Robe.
 - 2 Cameras, complete
 - Miscellaneous tools used in connection with overhead construction.
 - Draughting instruments.

Respectfully yours,

WALTER J. BURKE,
Superintendent, Wire Division.

THE DEPARTMENT ORGANIZATION.

Commissioner, THEODORE A. GLYNN.
 Chief Clerk, JAMES P. MALONEY.
 Chief of Department, JOHN O. TABER.
 Dist. Chief, WILLIAM H. McCORKLE, in charge of Bureau of
 Supplies and Repairs.
 Superintendent of High Pressure, Steam and Marine Service,
 EUGENE M. BYINGTON.
 Superintendent of Fire Alarms, GEORGE L. FICKETT.
 Superintendent of Wire Division, WALTER J. BURKE.
 Chief Operator and Assistant Superintendent of Fire Alarms,
 RICHARD DONAHUE.
 Chief Clerk, Wire Division, FRANK H. RICE.
 Medical Examiner, WILLIAM J. McNALLY, M.D.

CLERKS.

Fire Department.

James P. Maloney, Chief Clerk; Edward L. Tierney, Chief of License Division—Bureau of Fire Prevention; George F. Murphy, Herbert J. Hickey, John J. Coholan, William J. Hurley, Frank M. Fogarty, William J. O'Donnell, Thomas W. O'Connell, Warren F. Fenlon. Henry J. Eagan, Joseph F. O'Brien, James P. McKenna, Wm. D. Slattery, John J. Shea, James H. Finnerty.

Wire Division.

William McSweeney, Charles S. Carroll, Martin P. Cummings Selina A. O'Brien, Mary E. Fleming, May D. Marsh.

HEADQUARTERS.

	Per Annum.
1 Commissioner	\$7,500
1 Chief Clerk	2,500
1 Medical examiner	3,500
1 Secretary and stenographer	2,200
1 Executive Clerk in charge Motor Apparatus supplies and repairs	2,500
1 Clerk	1,600
1 Clerk	1,500
1 Clerk	1,400
1 Clerk	1,200
1 Clerk	1,000
1 Assistant engineer (messenger)*	1,800
2 Hosemen (clerks)*	1,800

* Detailed from Fire-fighting Branch.

FIRE DEPARTMENT.

79

	Per Week.
1 Janitress	\$20 00
	Per Day.
Elevator Man	\$4.00

15

FIRE PREVENTION BUREAU.

Per Annum.

1 Chief Fire Prevention	\$2,500
1 Clerk	2,000
1 Clerk	1,700
1 Clerk	1,200
1 Constable	1,500

5

FIRE-FIGHTING BRANCH.

Per Annum.

1 Chief of Department	\$5,000
4 Deputy chiefs	4,000
15 District chiefs	3,500
66 Captains	2,500
94 Lieutenants	2,300
1 Aide-to-Chief (lieutenant)	2,300
1 Aide-to-Commissioner (private)	1,800
3 Engineers (marine)	2,000
48 Engineers	1,900
51 Assistant Engineers	1,800
2 Assistant engineers	1,700
927 Privates:	
807	\$1,800
25	\$1,700-\$1,800
42	\$1,600-\$1,700
17	\$1,500-\$1,600
36	\$1,400-\$1,500

1,213

BUREAU SUPPLIES AND REPAIRS.

Per Annum.

1 District Chief in charge	\$3,500
1 Superintendent, High Pressure Steam and Marine Service	3,800
1 Supervisor, motor apparatus	2,700
1 Shop foreman	2,500
1 Lieutenant, foreman hose and harness shop	2,300
1 Auto engineer (engineer)	2,500
1 Engineer and Architect	2,500
1 Storkeeper (hoseman)	2,000
1 Master plumber (engineer)	1,900
1 Master carpenter (hoseman)	1,800

	Per Annum.
1 Master Painter	\$1,800
1 Foreman auto mechanic	1,900
1 Machinist (engineer)	1,900
16 Privates	1,800
1 Clerk in charge	2,000
1 Clerk	1,400
1 Clerk	1,500
1 Stenographer	1,000
7 Engineers	1,900
7 Engineers (High Pressure Service)	1,900
4 Assistant engineers (High Pressure Service)	1,800
	Per Day.
3 High Pressure engineers	\$7 00
3 Firemen	5 50
	Per Week.
1 Engineer	\$40 00
	Per Annum.
1 Master steamfitter	1,800
	Per Day.
2 Plumbers	\$5 40
1 Steamfitter	5 00
1 Leading painter	5 25
9 Painters	5 00
2 Wheelwrights	5 50
1 Leading machinist	5 25
4 Machinists	5 00
9 Auto repairers	5 00
2 Battery and ignition men	5 00
1 Auto repairer and tester	5 50
1 Auto mechanic and machinist	5 00
1 Auto blacksmith	5 50
1 Battery and ignition man	5 50
4 Blacksmiths	5 00
5 Blacksmith's helpers	4 25
4 Carpenters	5 00
2 Hose and harness repairers	5 00
1 Hose and harness repairer	4 50
1 Vulcanizer	4 50
1 Chauffeur	5 00
2 Teamsters	4 00
2 Laborers	4 00
1 Steamfitter's helper	4 25

FIRE ALARM BRANCH.

Per Annum.

1 Superintendent fire alarm	\$3,500
1 Assistant Superintendent and Chief Operator .	3,000
1 Supervising operator	2,400
3 Principal operators	2,300
3 Operators	2,200
4 Assistant operators	1,800
1 Assistant operator (sliding scale).	1,500-1,600
2 Assistant operators (sliding scale)	1,400-1,500
1 Foreman construction	2,700
1 Assistant foreman construction	2,200
1 Stockman	1,800

Per Day.

1 Machinist (7 day)	\$5 25
2 Machinists (7 day)	5 00
3 Cable splicers	5 75
5 Inside wiremen	5 60
4 Repairers and linemen	5 00
9 Linemen	5 00
1 Laborer	4 00

CHIEF OF DEPARTMENT.

JOHN O. TABER.

Headquarters, Engine House 26-35, Mason Street.

The Chief is in charge of the fire protection of the city, which is divided into three divisions, each commanded by a deputy chief, which are subdivided into fifteen districts, each commanded by a district chief.

DIVISION 1.

Deputy Chief, EDWARD J. SHALLOW.

Headquarters, Ladder House 8, Fort Hill Square.

This division comprises Districts 1, 2, 3, 4, 5.

*District 1.**District Chief*, HENRY J. POWER.Headquarters, Ladder House 2, Paris Street,
East Boston.*Apparatus Located in the District.*—Engines 5, 9, 11, 31 (fireboat), 40, 47 (fireboat), Ladders 2, 21, Chemical 7.*District 2.**District Chief*, JOHN P. MURRAY.Headquarters, Engine House 50, Winthrop Street,
Charlestown.*Apparatus Located in the District.*—Engines 27, 32, 36, 50, Ladders 9, 22.*District 3.**District Chief*, CORNELIUS J. O'BRIEN.

Headquarters, Ladder House 18, Pittsburgh Street.

Apparatus Located in the District.—Engines 25, 38, 39, 44 (fireboat), Ladders 8, 18, Water Tower 3.*District 4.**District Chief*, CHARLES A. DONOHUE.

Headquarters, Engine House, 4 Bulfinch Street.

Apparatus Located in the District.—Engines 4, 6, 8, Ladders 1, 24, Water Tower 1.

District 5.

District Chief, ALBERT J. CAULFIELD.

Headquarters, Engine House 26-35, Mason Street.

Apparatus Located in the District.—Engines 7, 10, 26, 35, Ladder 17, Recue 1.

DIVISION 2.

Deputy Chief, HENRY A. FOX.

Headquarters, Engine House 22, Warren Avenue.

This division comprises Districts 6, 7, 8, 11.

District 6.

District Chief, HARRY M. HEBARD.

Headquarters, Engine House 1, Dorchester Street,
South Boston.

Apparatus Located in the District.—Engines 1, 2, 15, 43, Ladders 5, 19, 20.

District 7.

District Chief, FRANK A. SWEENEY.

Headquarters, Engine House 22, Warren Avenue.

Apparatus Located in the District.—Engines 3, 22, 33, Ladders 3, 13, 15, Water Tower 2.

District 8.

District Chief, FRANK J. SHEERAN.

Headquarters, Ladder House 12, Tremont Street.

Apparatus Located in the District.—Engines 13, 14, 37, Ladders 12, 26.

District 11.

District Chief, JAMES F. McMAHON.

Headquarters, Engine House 41, Harvard Avenue,
Brighton.

Apparatus Located in the District.—Engines 29, 34, 41, 51, Ladders 11, 14.

DIVISION 3.

Deputy Chief, WALTER M. McLEAN.

Headquarters, Ladder House 23, Washington Street,
Grove Hall.

This division comprises Districts 9, 10, 12, 13, 14, 15.

*District 9.**District Chief*, JOSEPH H. KENNEY.

Headquarters, Engine House 12, Dudley Street.

Apparatus Located in the District.—Engines 12, 21, 23, 24, Ladder 4.*District 10.**District Chief*, FRANCIS J. JORDAN.Headquarters, Engine House 18, Harvard Street,
Dorchester.*Apparatus Located in the District.*—Engines 17, 18, 52, Ladders 7, 29.*District 12.**District Chief*, JOHN N. LALLY.Headquarters, Engine House 28, Centre Street,
Jamaica Plain.*Apparatus Located in the District.*—Engines 28, 42, Ladders 10, 23, 30.*District 13.**District Chief*, MICHAEL J. KENNEDY.Headquarters, Engine House 45, Corner Washington
and Poplar Streets, Roslindale.*Apparatus Located in the District.*—Engines 30, 45, 53, Ladders 16, 25.*District 14.**District Chief*, ALLAN J. MACDONALD.Headquarters, Engine House 46, Peabody Square,
Dorchester.*Apparatus Located in the District.*—Engines 16, 20, 46, Ladders 6, 27.*District 15.**District Chief*, JOSEPH A. DOLAN.Headquarters, Engine House 48, Corner Harvard
Avenue and Winthrop Street, Hyde Park.*Apparatus Located in the District.*—Engines 19, 48, 49, Ladder 28.

FIRE STATIONS.

LOCATION.

LOCATION.	Number of Feet in Lot.	Occupied by
Dorchester and Fourth streets.....	8,167	Engine 1 and Ladder 5.
Corner of O and Fourth streets.....	4,000	Engine 2.
Bristol street and Harrison avenue.....	4,000	Engine 3 and Ladder 3.
Bulfinch street.....	6,098	Engine 4, Chemical 1 and Tower 1.
Marion street, East Boston.....	3,265	Engine 5.
Leverett street.....	2,269	Engine 6.
East street.....	1,893	Engine 7.
* Salem street.....	2,568	Engine 8.
Paris street, East Boston.....	4,720	Engine 9 and Ladder 2.
River street.....	1,886	Engine 10.
Saratoga and Byron streets, East Boston,	10,000	Engine 11 and Ladder 21.
Dudley street.....	7,320	Engine 12.
Cabot street.....	4,832	Engine 13.
Centre street.....	5,713	Engine 14.
Dorchester avenue.....	2,803	Engine 15.
Corner River and Temple streets.....	12,736	Engine 16 and Ladder 6.
Meeting House Hill, Dorchester.....	9,450	Engine 17 and Ladder 7.
Harvard street, Dorchester.....	9,440	Engine 18.
Babson street, Dorchester.....	7,683	Engine 19.
Walnut street, Dorchester.....	9,000	Engine 20 and Ladder 27.
Columbia road, Dorchester.....	10,341	Engine 21.
Warren avenue.....	7,500	Engine 22 and Ladder 13.
Northampton street.....	3,445	Engine 23.
Corner Warren and Quincy streets.....	4,186	Engine 24.
Fort Hill square.....	4,175	Engine 25 and Ladder 8, Rescue 1.
Mason street.....	5,623	Engines 26 and 35.
Elm street, Charlestown.....	2,600	Engine 27.
Centre street, Jamaica Plain.....	10,377	Engine 28 and Ladder 10.
Chestnut Hill avenue, Brighton.....	14,358	Engine 29 and Ladder 11.
Centre street, West Roxbury.....	12,251	Engine 30 and Ladder 25.
521 Commercial street, on land of Public Works Department.		

Fire Stations.— Concluded.

LOCATION.	Number of Feet in Lot.	Occupied by
Bunker Hill street, Charlestown.....	8,188	Engine 32.
Corner Boylston and Hereford streets....	5,646	Engine 33 and Ladder 15.
Western avenue, Brighton.....	4,637	Engine 34.
Monument street, Charlestown.....	5,668	Engine 36 and Ladder 22.
Corner Longwood and Brookline avenues,	5,231	Engine 37 and Ladder 26.
Congress street.....	4,000	Engines 38 and 39.
Sumner street, East Boston.....	4,010	Engine 40.
Harvard avenue, near Cambridge street, Brighton.	6,112	Engine 41 and Ladder 14.
Washington street, at Egleston square,...	3,848	Engine 42 and Ladder 30.
Andrew square.....	5,133	Engine 43 and Ladder 20.
Northern Avenue Bridge.....		Engine 44, fireboat.
Washington and Poplar streets, Roslin- dale.	14,729	Engine 45 and Ladder 16.
Dorchester avenue, Ashmont.....	4,875	Engine 46.
Adjoining South Ferry, East Boston....	11,950	Engine 47, fireboat
Harvard avenue and Winthrop street, Hyde Park.	9,450	Engine 48 and Ladder 28.
Church street.....	3,412	
Milton and Hamilton streets.....	14,475	Engine 49.
Winthrop and Soley streets.....	5,230	Engine 50.
Oak square, Brighton.....	9,889	Engine 51.
Saratoga street, East Boston.....	9,300	Chemical Engine 7.
Corner Callender and Lyford streets....	7,200	Chemical 11 and Ladder 29.
Corner Walk Hill and Wenham streets...	11,253	Chemical 13.
Friend street.....	1,676	Ladder 1.
Dudley street.....	3,923	Ladder 4 and Chemical 10.
Main street, Charlestown.....	4,290	Ladder 9.
Tremont street.....	4,311	Ladder 12.
Harrison avenue.....	2,134	Ladder 17.
Pittsburgh street, South Boston.....	8,964	Ladder 18 and Tower 3.
Fourth street.....	3,101	Ladder 19.
Washington street, Dorchester.....	6,875	Ladder 23 and Chemical 5.
North Grove street.....	3,918	Ladder 24.

Headquarters Building, Bristol street, 15,679 feet of land.

Water Tower No. 2 is in Headquarters Building.

OTHER BUILDINGS.

Bureau S. & R. 363 Albany street, 8,000 feet of land.

Veterinary Hospital, Atkinson street, 64,442 feet of land.

Coal station, Main street, Charlestown, 2,430 feet of land.

Building No. 11 Wareham street, used by the Fire Alarm Branch as workshop and storeroom, 8,500 feet of land.

Building No. 618 Harrison avenue, used as a department garage and repair shop and a school for chauffeurs and officers, 3,816 feet of land.

EXPENDITURES FOR THE YEAR.

Personal service:

Permanent employees	\$2,543,748	61	
Temporary employees	981	80	
Unassigned	4,522	90	
			<hr/>
			\$2,549,253 31

Service other than Personal:

Printing and binding	\$53	75	
Postage	943	90	
Advertising and posting	260	30	
Transportation of persons	949	95	
Cartage and freight	429	92	
Hire of teams and auto trucks,	2,634	50	
Heat	2,471	18	
Light and power	20,436	69	
Rent, taxes and water	3,555	36	
Premium on surety bond	15	00	
Communication	2,673	84	
Motor vehicle repairs and care,	18,191	16	
Motorless vehicle repairs	2,210	50	
Cleaning	5,600	57	
Medical	25	00	
Veterinary	900	00	
Fees, service of venires, etc.,	580	00	
Boiler inspection	149	00	
Photographic and blueprinting,	2,339	45	
General plant	95,901	93	
Horseshoeing and clipping	3,249	55	
			<hr/>
			163,571 55

Carried forward \$2,712,824 86

<i>Brought forward</i>			\$2,712,824 86
Equipment:			
Cable, wire, etc.	\$16,216 06		
Electrical	14,052 40		
Motor vehicles	284,144 11		
Stable	1,965 70		
Furniture and fittings	7,263 06		
Office	3,067 39		
Marine	8 70		
Tools and instruments	27,698 31		
Wearing apparel	33,798 75		
General plant	1,097 23		
			<hr/>
			389,311 71
Supplies:			
Office	\$6,821 20		
Food and ice	842 56		
Fuel	108,363 86		
Forage and animal	6,099 15		
Medical, surgical, laboratory	192 49		
Laundry, cleaning, toilet	2,337 82		
Motor vehicle	27,626 77		
Chemicals and disinfectants	2,394 85		
General plant	3,778 72		
Cloth	121 00		
			<hr/>
			158,578 42
Materials:			
Building	\$21,076 24		
Electrical	3,548 92		
General plant	33,649 44		
			<hr/>
			58,274 60
Special items:			
Pensions and annuities	\$260,314 69		
Workingmen's compensation	834 67		
			<hr/>
			261,149 36
			<hr/>
			\$3,580,138 95
Wire Division:			
Personal service:			
Permanent employees	\$80,801 65		
Service other than personal:			
Printing and binding	\$929 00		
Postage	220 00		
Advertising and post- ing	126 70		
Transportation of per- sons	2,849 22		
Premium on surety bond	6 00		
			<hr/>
<i>Carried forward</i>	\$80,801 65		\$3,580,138 95

<i>Brought forward</i>		\$80,801 65	\$3,580,138 95
Communication	297 21		
Motor vehicle repairs and care.	50 00		
Fees, service of ve- nires, etc.	2 00		
Photographic and blueprinting	2 10		
General plant	20 85		
		4,503 08	
Equipment:			
Office	\$1,162 30		
Tools and instru- ments	33 95		
		1,196 25	
Supplies:			
Office	\$1,790 60		
Motor vehicle	381 95		
General plant	2 65		
		2,175 20	
Materials:			
Electrical	\$9 90		
General plant	25 62		
		35 52	
Special items:			
Pensions and annuities	600 00		
			89,311 70
			<u>\$3,669,450 65</u>

ENGINE 7, NEW BUILDING.

Payments on account:		
Contractors, C. & R. Construction Company,	\$21,886 00	
Advertising, blueprints, etc.	4 32	
		<u>\$21,890 32</u>

ENGINE 40, NEW BUILDING.

Contractor, John B. Dolan	\$7,200 90	
Architects	2,185 86	
Test borings	163 15	
Blueprints	123 59	
Advertising	5 00	
		<u>\$9,678 50</u>

FIRE ALARM SIGNAL STATION, BACK BAY FENS.

Underground work	\$2,713 36
Test posts	1,760 00
Freights	103 74
Borings	94 50
Blueprints	8 10
	<hr/>
	<u>\$4,679 70</u>

RECAPITULATION.

Fire Department	\$3,669,450 65
Engine 7, new building	21,890 32
Engine 40, new building	9,678 50
Fire Alarm Signal Station, Back Bay Fens	4,679 70
	<hr/>
	<u>\$3,705,699 17</u>

INCOME.

Permits for fires in open spaces, fireworks, blasting, transportation and storage of explosives,	\$15,676 25
Sale of old material	2,290 74
Sale of apparatus, etc.	1,530 68
Sale of badges	1,327 00
Damage to hose and cable	190 12
Damage to fire alarm posts and boxes	612 59
Damage to door	7 91
Damage to apparatus	10 00
Sale of manure	4 75
Refund on freight	9 46
Coal penalty	3 88
Install fire alarm box	38 25
Relocating post	58 80
	<hr/>
	\$21,760 43
Wire Division:	
Permits	69,876 80
	<hr/>
	<u>\$91,637 23</u>

ALARMS, FIRE LOSSES AND INSURANCE.

FIRE DEPARTMENT.

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MONTHS.	ALARMS RECEIVED.						Loss.		INSURANCE.		ALARMS.				Not in Building.	Out of City.	Damage None.	Damage Slight.	Damage Considerable.	Totally Destroyed.				
	FROM WHOM.										BELL.	FIRE.	Needless.	STILL.							FIRE.	Needless.		
	Members.	Police.	Citizens.	Telephone.	Automatic.	Unknown.	Total.	Buildings.	Contents.	Buildings.					Contents.	Fire.	False.	Needless.	Fire.	Needless.				
January	6	11	256	148	12	17	450	\$352,376	\$926,530	\$6,679,926	\$3,599,333	167	17	16	182	59	9	40	4	177	155	12	1	
February	9	22	296	139	22	15	503	261,481	296,948	5,762,606	2,736,100	214	16	17	185	55	7	31	3	171	204	18	3	
March	9	14	294	210	21	20	568	154,211	164,614	4,626,378	812,682	205	16	15	256	59	8	165	5	289	154	13	....
April	18	18	484	409	21	7	957	164,474	448,916	4,802,591	5,979,402	356	9	13	528	38	1	600	8	683	180	11	2	
May	8	11	301	188	48	9	555	186,487	391,834	3,173,155	2,596,476	233	10	8	238	33	9	221	3	300	156	11	1	
June	10	14	384	237	20	22	687	68,195	64,714	5,163,844	1,205,515	260	22	19	323	50	4	303	4	387	191	1	....
July	9	22	309	198	16	18	572	206,459	1,366,903	4,584,329	3,512,113	210	20	17	288	26	7	273	5	338	146	8	1	
August	2	20	316	171	14	15	538	59,045	70,581	2,358,049	2,122,973	205	19	14	244	46	201	1	6	302	136	3	2	
September	5	11	298	189	12	28	543	43,250	55,604	3,666,217	795,525	212	29	15	252	25	164	3	295	2	348	110	3	1
October	10	19	412	298	15	57	811	79,120	116,223	3,754,920	3,009,592	297	61	21	382	39	266	3	406	4	506	165	3	1
November	4	15	273	190	29	36	547	205,794	288,753	4,076,309	3,092,906	192	37	18	238	48	244	4	179	3	263	155	5	4
December	7	11	280	182	23	27	530	151,534	162,254	7,277,536	1,607,402	204	31	24	200	54	278	4	118	4	203	189	6	2
Totals	97	188	3,903	2,559	223	271	7,241	\$1,932,426	\$4,353,874	\$55,925,860	\$31,070,019	2,755	287	197	3,316	532	60	2,872	51	3,967	1,941	94	18	

CAUSES OF FIRES AND ALARMS FROM JANUARY 1, 1923, TO JANUARY 1, 1924.

Alarms, false, needless, bell and still.....	1,016	Hot ashes in wooden receptacle.....	95
Alarms, out of city.....	51	Incendiary and supposed..	27
Automatic alarms, false and accidental.....	154	Lamp upsetting and explosion.....	18
Automobiles.....	364	Miscellaneous.....	404
Brush, rubbish, etc.....	2,034	Oil stove, careless use and explosion.....	73
Careless use lamp, candle.	51	Overheated furnace, stove, boiler.....	114
Careless use matches and set by rats.....	395	Set by boys.....	140
Careless use pipe, cigar and cigarette.....	501	Spark from chimneys, stove.....	135
Chimneys, soot burning..	292	Sparks from locomotive, engine.....	66
Clothes near stove.....	19	Spontaneous combustion..	139
Defective chimney, stove pipe, boiler.....	87	Thawing water pipes.....	41
Electric wires, motors....	173	Unknown.....	675
Fireworks and firecrackers,	46		
Gas jet, gas stove.....	66		
Gasolene, naphtha, benzine.....	11		
Grease in ventilator.....	54	Total.....	<u>7,241</u>

1923.	FIRE EXTINGUISHED BY						
	Extinguishers.	Buckets of Water.	Chemical Engines.	Hydrant Streams.	Steamers.	Miscellaneous.	Citizens.
January.....	87	22	56	40	27	69	44
February.....	106	25	86	46	43	56	34
March.....	106	35	86	62	31	105	31
April.....	122	78	102	219	30	284	41
May.....	94	42	95	95	29	65	48
June.....	151	52	112	119	38	62	45
July.....	93	50	67	135	49	55	44
August.....	97	39	79	97	41	52	38
September.....	94	38	62	124	38	77	29
October.....	116	96	102	170	47	101	43
November.....	75	46	75	69	30	99	33
December.....	73	34	88	47	37	82	39
Totals.....	1,214	557	1,010	1,223	440	1,107	469

FIRES WHERE LOSSES EXCEEDED \$15,000.

DATE.	Location and Owner.	Loss.
1923.		
Jan. 10.....	58 and 60 Summer street, Abrahams Company <i>et al.</i>	\$16,711
Jan. 13.....	230 Beacon street, Mrs. J. M. Jackson.....	35,221
Jan. 13.....	36 and 38 Hawkins street and 7½ Chardon street, S. M. Stewart Estate.....	25,783
Jan. 14.....	63 Mt. Vernon street, H. M. Sweet <i>et al.</i>	105,250
Jan. 15.....	36 and 38 Fulton street, Abram Re Company <i>et al.</i>	17,965
Jan. 19.....	140-148 Harvard avenue, W. P. & J. Cotter <i>et al.</i>	49,201
Jan. 20.....	73 and 75 South street and 170-180 Essex street, L. Schapiro Shoe Company <i>et al.</i>	150,646
Jan. 22.....	118-128 Lincoln street, R. E. McDonald <i>et al.</i>	598,816
Feb. 12.....	35-39 Arch street, M. Steinert & Son Company <i>et al.</i>	41,760
Feb. 16.....	18 and 20 Chauncy street, Kaitz Brothers <i>et al.</i>	23,446
Feb. 21.....	132-138 Worcester street, S. & A S. & F. E. Pelonsky <i>et al.</i> ...	55,980
Feb. 24.....	530-540 Atlantic avenue, F. P. Bennett & Co., Inc., <i>et al.</i> ...	28,424
Feb. 27.....	326-330 Washington street, Dorchester, Norfolk Lodge of Odd Fellows <i>et al.</i>	29,336
Feb. 27.....	1110-1130 Washington street and 106-112 Dover street, H. S. Gordon Leather Company <i>et al.</i>	30,655
Feb. 27.....	124 and 126 Pearl street, Isabelle Anderson <i>et al.</i>	25,889
March 2.....	524 and 526 Rutherford avenue, New England Newspaper Publishing Company <i>et al.</i>	37,216
March 13.....	132 and 134 Washington street and 1 and 3 Dock square, D. Sears Real Estate Trust <i>et al.</i>	46,888
March 29.....	Rear 81 Bristol street, J. F. Paul & Co. <i>et al.</i>	25,299
March 30.....	65-69 Summer street, Johnson & Johnson <i>et al.</i>	17,978
April 1.....	131-137 Washington street and 53-57 Brattle street, Leopold Morse Company.....	19,858
April 6.....	266-270 Border street, Acme White Lead and Color Works,	56,492
April 7.....	11-17 East street and 711 Atlantic avenue, American Hide and Leather Company.....	57,549
April 10.....	20 and 22 Purchase street and 361 and 363 Atlantic avenue, Liberty Trading Company <i>et al.</i>	37,302
April 14.....	185 and 187 State street and 82 and 84 Central street, The Kelley Peanut Company <i>et al.</i>	175,035
April 15.....	125-131 Federal street, H. S. Hunnewell <i>et al.</i>	29,903
April 23.....	75 West Fifth street, Roman Catholic Church.....	22,588
April 25.....	116-124 Merrimac street, H. Traiser & Co., Inc.....	103,710
May 2.....	217 and 219 State street and 114 Central street, Webster Thomas Company <i>et al.</i>	340,816
May 6.....	84-88 Hawley street, Kennedy's Clothing Company <i>et al.</i> ...	20,736
May 26.....	121 and 123 East Dedham street, P. H. Graham & Sons <i>et al.</i> ,	25,658
May 30.....	850 Washington street, Meyer Pearlmuter <i>et al.</i>	16,467

Fire Losses.—Concluded.

DATE.	Location and Owner.	Loss.
May 31.....	35 and 37 Wareham street, American Slipper Manufacturing Company <i>et al.</i>	20,319
June 20.....	76 and 78 Batterymarch street, Estate of Moses Kimball <i>et al.</i>	35,979
July 5.....	131-137 Kingston street, Star Manufacturing Company <i>et al.</i>	17,425
July 16.....	199 Harrison avenue, Boston Shoe Polish Manufacturing Company <i>et al.</i>	16,579
July 18.....	374-394 Congress street, Thomas Kelly Company <i>et al.</i>	1,269,300
July 19.....	Mill street, Storehouse No. 30, W. Ellery <i>et al.</i>	78,048
July 28.....	318 Broadway, Boston & Albany <i>et al.</i>	46,143
Aug. 24.....	628-636 Washington street and 1-9 Essex street, Hyman Brothers <i>et al.</i>	27,266
Sept. 13.....	67-73 Sudbury street and 9 Hawkins street, Capitol Upholstering Company <i>et al.</i>	31,336
Oct. 6.....	118 Western avenue, Griffith Keiver Company <i>et al.</i>	35,183
Oct. 8.....	160-166 North street, Bay State Upholstering Company <i>et al.</i>	16,233
Nov. 1.....	694-702 Washington street and 2-12 Kneeland street, Freedman, Levine and Freedman <i>et al.</i>	21,093
Nov. 16.....	605-611 Washington street, Weinberg Brothers <i>et al.</i>	15,363
Nov. 17.....	65 and 67 Purchase street and 173 and 175 High street, S. M. Fay Estate <i>et al.</i>	79,459
Nov. 17.....	209 and 211 State street, The Murray Company <i>et al.</i>	123,072
Nov. 18.....	1612-1620 Blue Hill avenue, Price Brothers & Mission <i>et al.</i> ,	59,358
Nov. 22.....	107 and 109 Kingston street and 105 and 107 Essex street, Samuel Lieberman <i>et al.</i>	15,943
Nov. 30.....	85-91 Essex street, B. & A. Skirt Co. <i>et al.</i>	49,130
Dec. 7.....	605-611 Washington street, Massachusetts Skirt Company <i>et al.</i>	17,586
Dec. 10.....	288-294 Devonshire street, Northern Commission Company <i>et al.</i>	24,414
Dec. 15.....	889-899 Dorchester avenue, Samuel Levitt <i>et al.</i>	15,515
Dec. 17.....	3089-3099 Washington street and 1 Beethoven street, D. W. & S. W. Littlefield <i>et al.</i>	27,360
Dec. 18.....	6-14 Congress street and 43 State street, State Street Exchange <i>et al.</i>	16,138

STATISTICS.

Population, January 1, 1924 (estimated)	847,942
Area, square miles	47.81
Number brick, etc., buildings	34,957
Number of wooden buildings	78,825

Fires in brick and stone buildings	1,784
Fires in wooden buildings	1,364
Out of city	51
Not in buildings	2,872
False and needless	1,170

Total alarms 7,241

FIRE LOSS FOR THE YEAR ENDING DECEMBER 31, 1923.

Building loss insured	\$1,830,951
Contents loss insured	4,110,798
	<hr/>
	\$5,941,749
Building loss not insured	\$101,473
Contents loss not insured	243,078
	<hr/>
	344,551

Total loss buildings and contents \$6,286,300

Marine loss \$14,121

YEARLY LOSS FOR THE LAST FIFTEEN YEARS.

Year ending February 1, 1909	\$3,610,000
“ “ “ 1, 1910	1,680,245
“ “ “ 1, 1911 (11 months)	3,159,989
“ “ January 1, 1912	2,232,267
“ “ “ 1, 1913	2,531,017
“ “ “ 1, 1914	*3,138,373
“ “ “ 1, 1915	3,013,269
“ “ “ 1, 1916	3,004,600
“ “ “ 1, 1917	†2,372,489
“ “ “ 1, 1918	‡3,981,227
“ “ “ 1, 1919	2,822,109
“ “ “ 1, 1920	2,577,584
“ “ “ 1, 1921	3,139,566
“ “ “ 1, 1922	4,010,201
“ “ “ 1, 1923	3,304,595
“ “ “ 1, 1924	6,286,300

* Does not include marine loss of \$1,116,475, steamship “Templemore.”

† Does not include marine loss of \$101,312, steamship “City of Naples” *et al.*

‡ Does not include marine loss of \$75,660.

NOTE.—January loss, 1911, amounting to \$165,001, deducted from previous year and included in calendar year January 1, 1911, to January 1, 1912.

ALARMS FOR THE PAST TEN YEARS.*

YEAR.	Bell.	Still and Automatics.	Totals.
1923.....	3,239	4,002	7,241
1922.....	2,733	3,401	6,134
1921.....	2,359	2,888	5,247
1920.....	2,029	2,456	4,485
1919.....	2,733	2,690	5,423
1918.....	2,413	2,649	5,062
1917.....	2,252	2,526	4,778
1916.....	2,350	2,128	4,531
1915.....	2,847	2,590	5,437
1914.....	2,945	2,589	5,534

* Each fire is treated as having only one alarm.

ROLL OF MERIT, BOSTON FIRE DEPARTMENT.

James F. McMahon, District Chief.
Edward McDonough, Captain, Engine Company 6.
Thomas J. Muldoon, Captain, Engine Company 16.
Thomas H. Downey, Captain, Engine Company 22.
Michael J. Teehan, Captain, Engine Company 24.
Joseph P. Hanton, Captain, Engine Company 33.
Dennis Driscoll, Captain, Engine Company 37.
Frederick F. Leary, Captain, Ladder Company 3.
Carl S. Bowers, Lieutenant, Aide to Chief.
Henry J. Kelly, Lieutenant, Engine Company 32.
Timothy J. Heffron, Lieutenant, Ladder Company 9.
Michael J. Dacy, Lieutenant, Ladder Company 20.
John J. Kennedy, Ladderman, Ladder Company 13.
Martin A. Kenealy, Captain, retired.
James E. Downey, Hoseman, retired.

MEMBERS PENSIONED FROM FEBRUARY 1, 1923 TO
FEBRUARY 1, 1924.

William L. Kelley.
John J. Driscoll.
James F. Boyle.
Thomas A. Quinn.
Mellen R. Joy.
William S. Abbott.
John M. McEwan.
John M. Shanley.
Frank P. Elliott.
William Bowers.
John L. Gannon.
Frank A. Bailey.
David Isaacs.

Michael J. McNamara.
William J. Cox.
Arthur W. Helmund.
Benjamin F. Underhill.
Edward J. Reavey.
John E. Fleming.
Thomas Buckley.
Edward I. McLaughlin.
William A. Porter.
John Connell.
Peter J. Donovan.
Williard R. Pulsifer.
Frank Coyle.

DEATH OF MEMBERS FROM FEBRUARY 1, 1923 TO
FEBRUARY 1, 1924.

Dennis J. Burnett.
J. Paul Haynes.

District Chief James J. Caine.
Timothy F. Holland.

DEATH OF PENSIONERS FROM FEBRUARY 1, 1923 TO
FEBRUARY 1, 1924.

Jonathan M. Morris.
Charles P. Smith.
Stephen W. Fletcher.
J. E. Corea.
William H. Guinan.
Cornelius H. Leary.
Charles P. Boudreau.
Ex. Commissioner and Chief
John Grady.
Ex. Chief of Department
Peter F. McDonough.
John Flavell.
Edward J. Lynch.

D. O'Riordan.
Lawrence Scallan.
John K. Weelock.
Thomas F. Frazer.
Thomas W. Gowen.
James E. Nolan.
Lemuel A. Withington.
W. H. McDonald.
J. T. Weston.
Joseph Riley.
W. J. Muir.
Charles H. Windhorn.

BOSTON FIREMEN'S RELIEF FUND.

To t he Members of the Body Corporate of the Boston Firemen's Relief Fund, Boston, Massachusetts.

DEAR SIRs,— We hereby certify that we have audited the accounts of the Treasurer of the Boston Firemen's Relief Fund to the close of business August 31, 1924, and find them correct.

The deposits in the banks and the checks drawn thereon have been compared with the accounts received from the banks, and have been found to agree therewith, and are all properly entered on the books of the treasurer.

Income from all sources is accounted for. Payments are supported by proper vouchers or by paid checks, and the balance on hand at close of business August 31, 1924, is correct.

We have examined the securities belonging to the fund, and find them as stated on schedules herewith.

We have seen a bond issued by the Employees' Liability Assurance Corporation to D. J. Cadigan, treasurer, for \$25,000.00.

A summary of receipts and disbursements for the year ending August 31, 1924, is appended hereto.

Respectfully submitted,

AMOS D. ALBEE SON & Co.,
Certified Public Accountants.

FIRE DEPARTMENT.

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RECEIPTS AND DISBURSEMENTS FROM SEPTEMBER 1, 1923, TO
AUGUST 31, 1924.*Receipts.*

Amount received from Ball Fund	\$27,496 46
Interest on bonds	\$8,373 75
Less accrued interest paid	98 09
	<hr/>
Interest on Liberty Loan bonds	8,275 66
Dividends on stocks	2,059 32
Interest on deposits	237 50
Donations	209 91
City of Boston bonds matured	377 00
American Telephone and Telegraph rights sold	11,000 00
West End Street Railway stock sold	31 57
	47 46
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Cancelled checks, not used	\$49,734 88
	28 00
	<hr/>
Balance, September 1, 1923	\$49,762 88
	9,559 64
	<hr/>
	<u>\$59,322 52</u>

Disbursements.

Death and sick benefits, gratuities, medical attendance and medicine	\$28,028 10
Salaries	800 00
Treasurer's bond	62 50
Free bed, Carney Hospital	300 00
Free bed, Peter Bent Brigham Hospital	200 00
Free bed, Massachusetts General Hospital	200 00
Box at First National Bank of Boston, vaults	10 00
Auditing, twelve months	200 00
Expenses, stationery, printing, etc	430 57
Legal services	849 50
Bonds purchased	20,144 10
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	\$51,224 77
Balance, Exchange Trust Company Savings Account	\$2,069 67
Balance, Exchange Trust Company Checking Account	2,969 77
Balance, Beacon Trust Company Savings Account	3,000 00
Balance, American Trust Company	58 31
	<hr/>
	8,097 75
	<hr/>
	<u>\$59,322 52</u>

